LLNL Livermore Site Second Quarter 2012 Self-Monitoring Report

This quarterly report presents the second quarter 2012 self-monitoring data for the ground water and soil vapor treatment facilities at the Lawrence Livermore National Laboratory (LLNL) Livermore Site. The volumes of ground water and soil vapor treated, and volatile organic compound (VOC) mass removed during the second quarter of 2012 are presented in Tables 1 and 2, respectively. An historical summary of VOC volume and mass removed are presented in Tables 3 and 4, respectively.

Attachment A presents results of ground water treatment facility and extraction well (ground water and soil vapor) VOC, and chromium analyses (Tables A-1 through A-4). During the second quarter of 2012, all effluent sample analytical results were within acceptable discharge limits.

Self-monitoring reports for all treatment facilities are presented in Attachment B. Monthly volumes of ground water extracted are shown in Attachment B; however, instantaneous flow rates are not shown for wells that are now only used for sampling and are not continuously pumped. The monthly volume shown for these wells is the quantity of water evacuated for sampling purposes.

A map showing Livermore Site treatment areas and treatment facility locations, and ground water elevation contour maps showing hydraulic capture zones for hydrostratigraphic units (HSUs) 1B, 2, 3A, 3B, 4, and 5, are presented in Attachment C. The contour maps for the individual HSUs are based on data collected during the second quarter of 2012.

A follow-on sampling plan for EPA Method 625 compounds was developed and executed during the second quarter to resample locations where bis(2-ethylhexyl)phthalate had been detected during the first quarter. Bis(2-ethylhexyl)phthalate was detected in the PTU11-I and GTU03-I January 2012 influent samples at concentrations of 10 μg/L and 53 μg/L, respectively. On April 4, 2012, influent and effluent samples were collected from PTU11, followed by influent and effluent samples being collected from GTU03 on April 5, 2012. Receiving water location (TFC-R003), which is down gradient of TFB-R002 was also sampled on April 5, 2012, due to the anomalous detection of bis(2-ethylhexyl)phthalate at the receiving water location TFB-R002 reported during the first quarter. Field blanks were poured at the influent and receiving water locations and, collocated samples were collected and submitted to a different analytical laboratory for EPA Method 625 analysis. The collection of field blanks and collocated samples were taken as a precautionary measure due to the elusiveness of bis(2-ethylhexyl)phthalate and the frequent difficulty in determining the source of the contaminant. In conclusion, no EPA Method 625 compounds were detected in any of the samples collected and submitted for analyses this quarter. The sampling effort for EPA 602 and 625 compounds confirmed our previous analytical results that these constituents are not present in treatment facility influent. Hence, EPA 602 and 625 sampling and analysis will not performed on an annual basis.

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Table 1. Volumes of ground water and soil vapor extracted and treated at the Livermore Site, April through June 2012.

Treatment Area ^a	Month	Volume of ground water extracted (Kgal) ^b	Volume of vapor extracted (Kcf) ^b
TFA	April	9,761	-
	May	9,018	-
	June	9,335	-
TFB	April	2,440	-
	May	2,150	-
	June	2,562	-
TFC	April	3,892	-
	May	4,059	-
	June	3,746	-
TFD	April	5,061	1,482
	May	6,604	1,571
	June	6,481	1,299
TFE	April	2,131	1,761
	May	2,154	1,429
	June	1,960	1,130
TFG	April	661	· -
	May	647	-
	June	610	-
TFH	April	957	1,885
	May	848	2,085
	June	805	2,071
TOTAL		75,882	14,713

^a Totals include ground water and soil vapor extracted from the following facilities:

TFA area: TFA, TFA-E, TFA-W

TFB area: TFB

TFC area: TFC, TFC-E, TFC-SE

TFD area: TFD, TFD-E, TFD-HPD, TFD-S, TFD-SE, TFD-SS, TFD-W, VTFD-ETCS, VTFD-HS

TFE area: TFE-E, TFE-HS, TFE-NW, TFE-SE, TFE-SW, TFE-W, VTFE-ELM, VTFE-HS

TFG area: TFG-1, TFG-N

TFH area: TF406, TF406-NW, TF518-N, TF518-PZ, TF5475-1, TF5475-2, TF5475-3, VTF406-HS, VTF511, VTF518-PZ, VTF5475

TFF started operation in February 1993 for fuel hydrocarbon remediation. In August 1995, the regulatory agencies agreed that the vadose zone remediation was complete, and in October 1996 a No Further Action status was granted for the ground water.

^b Totals are derived from individual extraction wells shown in Attachment B

^c Rounded number

Kcf = thousands of cubic feet

Kgal = thousands of gallons

Table 2. VOC mass removed at the Livermore Site, April through June 2012.

Treatment Area ^a	VOC mass removed from ground water (kg)	VOC mass removed from soil vapor (kg)	Total VOC mass removed (kg) ^b
TFA	1.1	-	1.1
TFB	0.6	-	0.6
TFC	1.2	-	1.2
TFD	5.9	0.6	6.5
TFE	2.2	1.1	3.3
TFG	0.2	-	0.2
TFH	0.8	5.3	6.1
TOTAL ^b	12.0	7.0	19.0

Table 3. Historical summary of volumes of water and soil vapor removed at the Livermore Site through June 2012.

Treatment Area ^a	Volume of ground water extracted (Mgal)	Volume of vapor extracted (Mcf)	
TFA	1,914	-	
TFB	452	-	
TFC	502	-	
TFD	1,038	103	
TFE	377	167	
TFG	84	-	
TFH	167	243	
TOTAL ^b	4,534	513	

Table 4. Historical summary of VOC mass removed from water and soil vapor at the Livermore Site through June 2012.

Treatment Area ^a	VOC mass removed from ground water (kg)	VOC mass removed from soil vapor (kg)	Total VOC mass removed (kg) ^b
TFA	209	- (ng)	209
TFB	81	-	81
TFC	106	-	106
TFD	852	95	947
TFE	222	151	373
TFG	12	-	12
TFH	39	1,246	1,285
TOTAL ^b	1,521	1,492	3,013

^a Refer to Table 1 footnote for facilities in each treatment facility area.

Abbreviations for Tables 2, 3 and 4:

kg = Kilograms.

Mcf = millions of cubic feet.

Mgal = millions of gallons.

VOC = Volatile organic compound.

^b Rounded number.

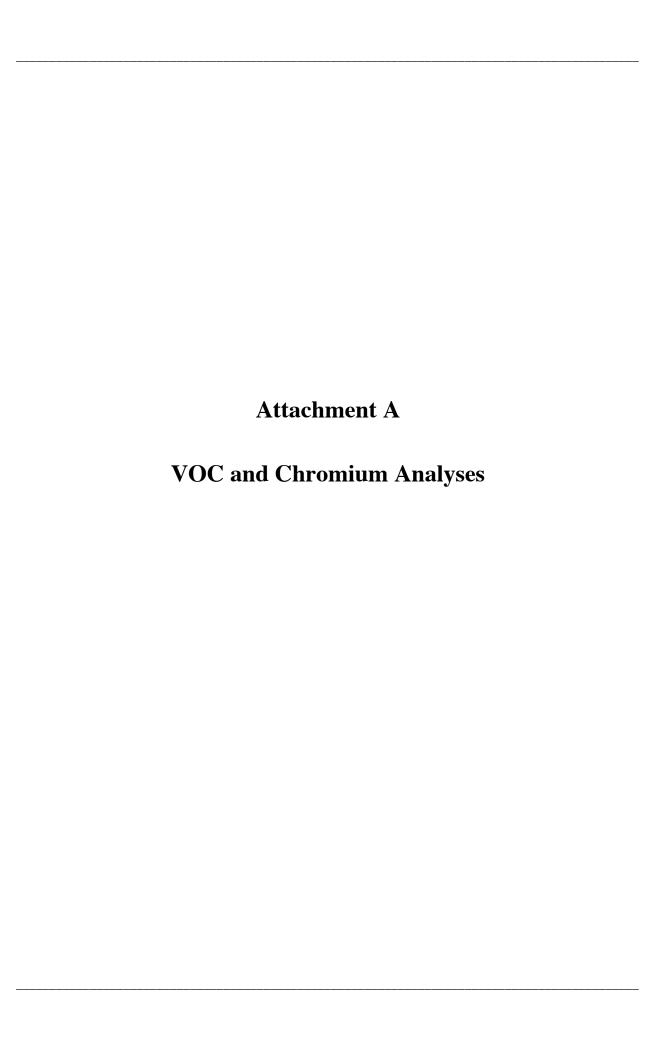


Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCI₄	CHCl ₃	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
			<-	-	-	-	ug/L (ppb)	-	-	-	-	-	->
TFA													
TFA-I001	02-APR-12	E601	<0.5	0.94	0.9	< 0.5	1.2	<1	<0.5	6.5	<0.5	0.67	<0.5
TFA-I001	01-MAY-12	E601	<0.5	0.92	0.85	< 0.5	1.2	<1	<0.5	6.3	<0.5	0.65	<0.5
TFA-I001	01-JUN-12	E601	<0.5	0.93	0.85	<0.5	1.2	<1	<0.5	6.4	<0.5	0.66	<0.5
TFA-E001	02-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E001	01-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
TFA-E001	01-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E													
W-254	02-APR-12	E601	<0.5	< 0.5	< 0.5	< 0.5	0.51	<1	< 0.5	37	< 0.5	0.96	<0.5
STU06-I	01-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	0.62	<1	< 0.5	39	< 0.5	1.1	< 0.5
STU06-I	04-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	0.72	<1	<0.5	40	<0.5	1	<0.5
STU06-E	02-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
STU06-E	01-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
STU06-E	04-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-W ^a													
TFB ^b													
TFB-I002	03-APR-12	E601	0.5	1.9	< 0.5	< 0.5	1.2	<1	2.4	0.99	< 0.5	11	<0.5
TFB-I002	01-MAY-12	E601	0.59	2.2	< 0.5	< 0.5	1.4	<1	3.2	1.3	< 0.5	14	<0.5
TFB-I002	04-JUN-12	E601	0.66	2.7	<0.5	<0.5	1.6	<1	4	1.6	<0.5	17	<0.5
TFB-E002	03-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	01-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
TFB-E002	02-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
TFB-E002	04-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC													
TFC-I003	04-APR-12	E601	< 0.5	0.87	< 0.5	< 0.5	0.57	<1	8.6	2.7	< 0.5	9	<0.5
TFC-I003	01-MAY-12	E601	< 0.5	0.84	< 0.5	< 0.5	0.6	<1	8.8	2.8	< 0.5	9.2	<0.5
TFC-I003	04-JUN-12	E601	<0.5	0.87	<0.5	<0.5	0.64	<1	9	2.8	<0.5	9.3	<0.5
TFC-E003	04-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E003	01-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	< 0.5	<0.5	<0.5
TFC-E003	04-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCI₄	CHCl ₃	1,1-DCA	1,2-DCA	1,1-DCE	1 2 DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
Station	Sampled	wethod	<-	-	1,1-DCA -	1,2-DCA -	ug/L (ppb)	1,2-DCE -	-	-	1,1,1-1CA -	-	->
TFC-E													
MTU1-I	05-APR-12	E601	<0.5	10	< 0.5	< 0.5	0.75	<1	14	0.65	< 0.5	7.3	3.4
MTU1-I	01-MAY-12	E601	< 0.5	12	< 0.5	< 0.5	0.77	<1	9.2	0.58	< 0.5	7.4	3.3
MTU1-I	04-JUN-12	E601	<0.5	13	<0.5	<0.5	0.83	<1	10	0.53	<0.5	7.9	3.7
MTU1-E	05-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU1-E	01-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	0.97	< 0.5
MTU1-E	04-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-SE													
PTU1-I	03-APR-12	E601	<0.5	7.1	< 0.5	< 0.5	2.1	<1	15	0.64	< 0.5	15	1
PTU1-I	01-MAY-12	E601	<0.5	6.9	< 0.5	< 0.5	2.1	<1	15	0.66	< 0.5	15	0.93
PTU1-I	04-JUN-12	E601	<0.5	7.4	<0.5	<0.5	2.2	<1	15	0.66	<0.5	16	0.94
PTU1-E	03-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU1-E	01-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
PTU1-E	04-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	< 0.5	<0.5	<0.5
TFD													
TFD-I004	19-APR-12	E601	1.2	1.6	< 0.5	< 0.5	< 0.5	<1	< 0.5	0.69	< 0.5	26	28
TFD-I004	01-MAY-12	E601	2.4	2.2	< 0.5	< 0.5	0.86	<1	0.72	1.5	< 0.5	62	21
TFD-I004	01-JUN-12	E601	2.3	2.1	<0.5	<0.5	0.9	<1	0.67	1.7	< 0.5	60	20
TFD-E004	19-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-E004	01-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TFD-E004	01-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	< 0.5	<0.5	<0.5
TFD-E ^{cd}													
PTU8-I	31-MAY-12	E601	4.4	2.2	< 0.5	< 0.5	1.6	<1	< 0.5	2.8	< 0.5	91	0.94
PTU8-I	05-JUN-12	E601	3.4	1.6	< 0.5	< 0.5	1.8	<1	< 0.5	3.3	< 0.5	64	0.78
PTU8-I	11-JUN-12	E601	3	1.9	<0.5	0.82	7.3	<1	<0.5	7.9	<0.5	99	0.83
PTU8-E	31-MAY-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU8-E	05-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-HPD ^e													
TFD-S													
PTU2-I	12-APR-12	E601	0.85	2	< 0.5	< 0.5	4	<1	1.2	6.4	<0.5	55	< 0.5
PTU2-I	07-MAY-12	E601	0.7	1.8	<0.5	<0.5	3.8	<1	1.1	6	<0.5	49	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCI ₄	CHCI ₃	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113	PCE -	1,1,1-TCA -	TCE -	Freon 11
TFD-S (cont.)													
PTU2-I	07-JUN-12	E601	0.88	2	<0.5	<0.5	4.1	<1	1.3	6.1	<0.5	55	<0.5
PTU2-E	12-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	07-MAY-12	E601	< 0.5	<0.5	<0.5	< 0.5	<0.5	<1	<0.5	< 0.5	< 0.5	< 0.5	<0.5
PTU2-E	07-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-SE													
PTU11-I	04-APR-12	E601	<0.5	3.3	0.7	1.3	8	<1	1	31	<0.5	86	<0.5
PTU11-I	01-MAY-12	E601	<0.5	3	0.72	1.3	8.8	<1	1	33	<0.5	87	<0.5
PTU11-I	04-JUN-12	E601	0.63	4.6	0.71	1.5	10	<1	1.7	33	<0.5	95	<0.5
PTU11-E	04-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	01-MAY-12	E601	< 0.5	<0.5	< 0.5	< 0.5	<0.5	<1	<0.5	< 0.5	< 0.5	< 0.5	<0.5
PTU11-E	04-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-SS													
PTU12-I	12-APR-12	E601	1.9	1.9	< 0.5	1.5	6.9	<1	0.53	15	<0.5	100	11
PTU12-I	07-MAY-12	E601	1.8	2.2	0.68	2.2	9.9	<1	0.57	20	< 0.5	110	6
PTU12-I	08-JUN-12	E601	1.8	2.2	0.74	2.2	11	<1	0.57	21	<0.5	120	5.6
PTU12-E	12-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E	07-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
PTU12-E	08-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-W													
PTU6-I	04-APR-12	E601	< 0.5	4.3	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	< 0.5	4.8	47
PTU6-I	02-MAY-12	E601	< 0.5	4.4	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	< 0.5	5.1	46
PTU6-I	14-JUN-12	E601	<0.5	4.4	<0.5	<0.5	<0.5	<1	< 0.5	<0.5	<0.5	5	47
PTU6-E	04-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU6-E	02-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
PTU6-E	14-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-E													
PTU3-I	03-APR-12	E601	< 0.5	2.5	< 0.5	< 0.5	8.8	<1	7.1	11	<0.5	65	< 0.5
PTU3-I	01-MAY-12	E601	<0.5	2.4	< 0.5	< 0.5	8.3	<1	7.3	9.8	< 0.5	60	<0.5
PTU3-I	04-JUN-12	E601	<0.5	2.3	<0.5	<0.5	7.9	<1	7.4	9.2	<0.5	58	<0.5
PTU3-E	03-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCI ₄	CHCI ₃	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
			<-	-	-	-	ug/L (ppb)	-	-	-	-	-	->
TFE-E (cont.)													_
PTU3-E	01-MAY-12	E601	< 0.5	<0.5	< 0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	< 0.5	<0.5
PTU3-E	04-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-HS													
W-2105	05-APR-12	E601	< 0.5	1.2	< 0.5	< 0.5	3	2.7	5.9	17	<0.5	360	<0.5
GTU07-I	05-APR-12	E601	< 0.5	1.2	< 0.5	< 0.5	3.2	2.8	5.6	15	<0.5	360	<0.5
GTU07-I	02-MAY-12	E601	< 0.5	1.1	< 0.5	<0.5	3.1	3.1	5.4	14	<0.5	300	<0.5
GTU07-I	06-JUN-12	E601	<0.5	1.2	<0.5	<0.5	3.2	3.4	5.6	15	<0.5	300	<0.5
GTU07-E	05-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU07-E	02-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
GTU07-E	06-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-NW													
PTU9-I	12-APR-12	E601	< 0.5	1.2	< 0.5	< 0.5	<0.5	<1	0.98	< 0.5	< 0.5	12	<0.5
PTU9-I	07-MAY-12	E601	< 0.5	1.2	< 0.5	< 0.5	<0.5	<1	1	< 0.5	< 0.5	12	<0.5
PTU9-I	08-JUN-12	E601	<0.5	1.2	< 0.5	<0.5	<0.5	<1	1.1	<0.5	<0.5	12	<0.5
PTU9-E	12-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	07-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	< 0.5	< 0.5	<0.5
PTU9-E	08-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-SE													
W-359	03-APR-12	E601	4.2	1.4	< 0.5	< 0.5	19	<1	6.7	8.9	< 0.5	240	1.2
MTU04-I	01-MAY-12	E601	4.3	1.5	< 0.5	< 0.5	21	<1	6.6	9.6	< 0.5	250	1.2
MTU04-I	04-JUN-12	E601	4.1	1.5	<0.5	<0.5	21	<1	6.3	10	<0.5	260	1.1
MTU04-E	03-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU04-E	01-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	< 0.5	< 0.5	<0.5
MTU04-E	04-JUN-12	E601	<0.5	<0.5	< 0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-SW													
MTU03-I	04-APR-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	1.5	1.4	5.8	1	< 0.5	13	< 0.5
MTU03-I	02-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	1.5	1.5	5.3	1.1	< 0.5	13	<0.5
MTU03-I	14-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	1.6	1.6	4.2	1.1	<0.5	14	<0.5
MTU03-E	04-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU03-E	02-MAY-12	E601	< 0.5	<0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	<0.5	< 0.5	< 0.5
MTU03-E	14-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCI ₄	CHCl ₃	1 1-DCA	1 2-DCA	1 1-DCE	1 2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
Station	Sampled	Wethou	<-	- -	1,1-DCA -	1,2-DCA -	ug/L (ppb)	1,2-DCE -	-	-	1,1,1-1CA -	-	->
TFE-W													
MTU05-I	04-APR-12	E601	<0.5	1	< 0.5	< 0.5	1.9	1	14	6.1	<0.5	29	0.51
MTU05-I	02-MAY-12	E601	< 0.5	1.1	< 0.5	< 0.5	2.1	1	16	6.8	<0.5	31	0.56
MTU05-I	14-JUN-12	E601	<0.5	1.1	<0.5	<0.5	2.1	<1	16	6.8	<0.5	31	0.58
MTU05-E	04-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU05-E	02-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	< 0.5	<0.5	<0.5
MTU05-E	14-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFG-1													
W-1111	11-APR-12	E601	2.7	10	< 0.5	< 0.5	0.86	<1	< 0.5	1.1	< 0.5	3.9	<0.5
GTU01-I	08-MAY-12	E601	2.7	10	< 0.5	< 0.5	0.9	<1	< 0.5	1	< 0.5	4	<0.5
GTU01-I	06-JUN-12	E601	2.7	11	<0.5	<0.5	0.97	<1	0.51	1.3	<0.5	4.2	<0.5
GTU01-E	11-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU01-E	08-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
GTU01-E	06-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFG-N													
MTU02-I	11-APR-12	E601	< 0.5	1.5	< 0.5	< 0.5	1	<1	1	17	< 0.5	5.2	< 0.5
MTU02-I	08-MAY-12	E601	< 0.5	1.6	< 0.5	< 0.5	1.1	<1	1.1	17	< 0.5	5.3	< 0.5
MTU02-I	06-JUN-12	E601	<0.5	1.7	<0.5	<0.5	1.2	<1	1.2	17	<0.5	5.5	<0.5
MTU02-E	11-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU02-E	08-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	< 0.5	< 0.5	< 0.5
MTU02-E	06-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF406													
PTU5-I	04-APR-12	E601	< 0.5	0.65	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	4	<0.5
PTU5-I	02-MAY-12	E601	< 0.5	0.7	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	4.1	<0.5
PTU5-I	14-JUN-12	E601	<0.5	0.66	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4.4	<0.5
PTU5-E	04-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU5-E	02-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	< 0.5	< 0.5	< 0.5
PTU5-E	14-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF406-NW													
W-1801	04-APR-12	E601	<0.5	1.2	< 0.5	< 0.5	< 0.5	<1	4.3	0.65	< 0.5	21	< 0.5
GTU03-I	30-MAY-12	E601	<0.5	1.6	< 0.5	< 0.5	< 0.5	<1	4.7	0.71	< 0.5	20	< 0.5
GTU03-I	07-JUN-12	E601	<0.5	1.4	<0.5	< 0.5	<0.5	<1	5	0.78	<0.5	23	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCI ₄	CHCI ₃	1,1-DCA	1,2-DCA	•	1,2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
			<-	-	-	-	ug/L (ppb)	-	-	-	-	-	->
TF406-NW (cont.)													
GTU03-E	04-APR-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
GTU03-E	30-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
GTU03-E	07-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF518-N ^f													
TF5475-1 ^g													
W-1302-2	21-JUN-12	E601	2.4	46	1.7	6.7	23	1.6	7.1	63	<0.5	440	<0.5
TF5475-2													
GTU09-I	18-APR-12	E601	2.2	22	0.76	3	19	<1	8.6	39	< 0.5	290	< 0.5
GTU09-I	01-MAY-12	E601	2.1	21	0.72	2.8	18	<1	7.8	37	< 0.5	280	<0.5
GTU09-I	04-JUN-12	E601	2.2	22	0.76	2.8	19	<1	7.6	40	<0.5	320	<0.5
GTU09-E	18-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU09-E	01-MAY-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	<0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
GTU09-E	04-JUN-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	< 0.5	<0.5	<0.5
TF5475-3 ^h													

Notes on following page.

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Well W-404 is sampled quarterly. All other operations have been suspended pending the extension of the TFA Arroyo Seco pipeline.

Notes:

CCl₄ = Carbon tetrachloride

 $CHCl_3 = Chloroform$

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

^a TFA-W effluent is discharged to the Livermore Water Reclamation Plant in accordance with Permit #1510G (2006-2008). The discharge limit for Total Toxic Organics is 1.0 mg/L.

^b TFB had multiple samples taken during the month of May due to the testing and verfication phase of the REVAL/wellfield expansion project.

^c TFD-E did not operate during the month of April due to equipment assembly and installation for the REVAL project.

^d TFD-E had multiple samples taken during the month of June due to the testing and verfication phase of the REVAL project.

e TFD-HPD has been modified to operate as a circulation cell to perform in situ bioremediation of contaminated ground water and sediments.

^fTF518-N did not operate during this reporting period due to mixed waste disposition issues.

⁹ TF5475-1 did not operate during this reporting period due to mixed waste disposition issues.

^h TF5475-3 did not operate during this reporting period due to mixed waste disposition issues.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

I	Extraction	Date	Analytic											
	Well	Sampled	Method	CCI ₄	CHCI ₃	1,1-DCA	1,2-DCA	1,1-DCE ug/L (ppb)	1,2-DCE	Freon 113	PCE -	1,1,1-TCA	TCE -	Freon 11
				<-				ug/L (ppb)						->
	TFA													
	W-109	12-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	0.5	1.8	<0.5	<0.5	< 0.5
	W-262	12-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
	W-408	12-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	0.61	<0.5	<0.5	<0.5
	W-415	12-APR-12	E601	<0.5	1.3	0.66	<0.5	1.3	<1	<0.5	12	<0.5	0.97	<0.5
	W-457	12-APR-12	E601	< 0.5	<0.5	0.98	<0.5	0.94	<1	<0.5	6.4	<0.5	<0.5	< 0.5
	W-518	12-APR-12	E601	< 0.5	<0.5	8.1	<0.5	3.4	<1	<0.5	3.5	<0.5	<0.5	< 0.5
	W-522	12-APR-12	E601	< 0.5	< 0.5	1.9	< 0.5	1.2	<1	<0.5	3.6	<0.5	<0.5	< 0.5
	W-605	12-APR-12	E601	<0.5	0.6	0.89	< 0.5	1.1	<1	<0.5	17	<0.5	0.88	< 0.5
	W-614	12-APR-12	E601	<0.5	0.52	<0.5	< 0.5	< 0.5	<1	<0.5	6	<0.5	< 0.5	< 0.5
	W-712	12-APR-12	E601	2.9	3	1.2	< 0.5	3.5	<1	<0.5	2	<0.5	3.4	< 0.5
	W-714	12-APR-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	8.1	< 0.5	< 0.5	< 0.5
	W-903	12-APR-12	E601	< 0.5	< 0.5	1.2	< 0.5	0.86	<1	< 0.5	4.7	< 0.5	< 0.5	< 0.5
	W-904	12-APR-12	E601	< 0.5	< 0.5	0.75	< 0.5	1	<1	< 0.5	6.4	< 0.5	< 0.5	< 0.5
	W-1001	12-APR-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	<0.5	< 0.5	< 0.5
	W-1004	12-APR-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	<0.5	2.5	<0.5	< 0.5	< 0.5
	W-1009	12-APR-12	E601	1.1	5.2	0.77	<0.5	3	<1	0.61	12	<0.5	2	<0.5
	TFA-E													
	W-254	02-APR-12	E601	<0.5	<0.5	<0.5	<0.5	0.51	<1	<0.5	37	<0.5	0.96	<0.5
	TFA-W ^a													
	W-404 ^b	26-JAN-12	E601	<0.5	<0.5	1.1	<0.5	1.8	<1	<0.5	10	<0.5	0.53	<0.5
	TFB													
	W-357	10-APR-12	E601	1.4	2.8	< 0.5	< 0.5	1.4	<1	3.8	1.2	< 0.5	32	< 0.5
	W-610	10-APR-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	1.3	<1	1.8	8.0	< 0.5	1.8	< 0.5
	W-620	10-APR-12	E601	< 0.5	1.2	< 0.5	< 0.5	1.2	<1	2.2	1.2	< 0.5	4.4	< 0.5
	W-621	10-APR-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	1	< 0.5	< 0.5	2.6	< 0.5
	W-655	10-APR-12	E601	< 0.5	0.63	< 0.5	< 0.5	< 0.5	<1	4.7	< 0.5	< 0.5	1.7	< 0.5
	W-704	10-APR-12	E601	0.6	3.7	< 0.5	< 0.5	1.9	<1	5.5	2.9	< 0.5	19	< 0.5
	W-1423	10-APR-12	E601	0.8	4.9	< 0.5	< 0.5	3.1	<1	3.3	1.9	< 0.5	9.3	< 0.5
	W-2501	10-APR-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	0.63	< 0.5	< 0.5	6.6	< 0.5
	W-2502	10-APR-12	E601	0.53	3.7	<0.5	<0.5	1.4	<1	<0.5	<0.5	<0.5	1.5	<0.5
	TFC													
	W-701	04-APR-12	E601	< 0.5	1.8	< 0.5	< 0.5	1.3	<1	25	3.8	<0.5	20	< 0.5
	W-1015	04-APR-12	E601	<0.5	0.52	<0.5	<0.5	0.72	<1	1.9	0.99	<0.5	4.4	<0.5
	W-1102	04-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	3	<0.5	<0.5	1.5	< 0.5
	W-1103	04-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	1.3	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCI ₄	CHCI ₃	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
			<-	-	-	-	ug/L (ppb)	-	-	-	-	-	->
TFC (cont.)													
W-1104	04-APR-12	E601	< 0.5	< 0.5	< 0.5	<0.5	< 0.5	<1	1.7	3.1	<0.5	5.5	<0.5
W-1116	04-APR-12	E601	<0.5	1.2	<0.5	<0.5	<0.5	<1	6.4	3.7	<0.5	7.6	<0.5
TFC-E													
W-368	01-MAY-12	E601	< 0.5	7.7	< 0.5	< 0.5	0.51	<1	19	2.5	< 0.5	13	4.6
W-413	01-MAY-12	E601	<0.5	14	<0.5	<0.5	0.85	<1	9.3	<0.5	<0.5	7.3	3.7
TFC-SE													
W-1213	03-APR-12	E601	< 0.5	5.7	< 0.5	< 0.5	2.4	<1	9.4	<0.5	<0.5	14	< 0.5
W-2201	03-APR-12	E601	<0.5	7.6	<0.5	<0.5	1.9	<1	18	0.78	<0.5	15	1.2
TFD													
W-351	20-APR-12	E601	23	4.1	<0.5	0.9	5.5	<1	4.5	6.7	<0.5	450	1.3
W-653	20-APR-12	E601	27	7.8	<0.5	<0.5	0.97	1.2	3.9	0.91	<0.5	810	<0.5
W-906	20-APR-12	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	2.3	<0.5
W-907-2	20-APR-12	E601	<0.5	3.6	< 0.5	< 0.5	2.2	<1	0.84	4.2	< 0.5	48	< 0.5
W-2011	20-APR-12	E601	0.75	0.94	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	12	< 0.5
W-2101	20-APR-12	E601	4.6	2.1	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	160	< 0.5
W-2102	20-APR-12	E601	33	11	< 0.5	< 0.5	0.81	<1	5.2	0.82	< 0.5	1100	0.67
W-1206	20-APR-12	E601	0.7	0.77	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	14	0.68
W-1208	20-APR-12	E601	2.1	2.1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	43	43
TFD-E													
W-2006 ^b	05-MAR-12	E601	< 0.5	1.4	2	7.2	45	<1	<0.5	18	< 0.5	190	< 0.5
W-1301 ^b	05-MAR-12	E601	< 0.5	0.69	< 0.5	< 0.5	5.8	<1	<0.5	12	< 0.5	39	< 0.5
W-1303 ^b	04-JAN-12	E601	4.2	3	1.4	5.3	9.2	2.1	<0.5	11	< 0.5	130	4.8
W-1306 ^D	05-MAR-12	E601	2.8	3.7	< 0.5	< 0.5	1	<1	< 0.5	4.8	< 0.5	100	< 0.5
W-1307 ^b	04-JAN-12	E601	3.7	0.9	<0.5	< 0.5	0.5	<1	<0.5	0.7	<0.5	66	< 0.5
W-1550 ^b	05-MAR-12	E601	2.2	2.3	<0.5	< 0.5	1.4	<1	< 0.5	3.9	< 0.5	47	< 0.5
W-2203 ^b	04-JAN-12	E601	12	2.6	<0.5	<0.5	2.5	<1	2.7	6.9	<0.5	93	<0.5
TFD-HPD													
W-1254	02-MAY-12	E601	1.5	0.52	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	<0.5	42	<0.5
W-1650 ^b	12-MAR-12	E601	1.7	1.4	< 0.5	< 0.5	< 0.5	<1	0.92	< 0.5	<0.5	110	<0.5
W-1653 ^b	12-MAR-12	E601	0.69	1.9	< 0.5	< 0.5	< 0.5	<1	<0.5	0.73	<0.5	100	<0.5
W-1655 ^D	12-MAR-12	E601	<0.5	2	<0.5	<0.5	<0.5	<1	<0.5	2.5	<0.5	68	<0.5
W-1657 ^b	12-MAR-12	E601	5.8	3	< 0.5	<0.5	< 0.5	<1	2.3	< 0.5	<0.5	540	< 0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction	Date	Analytic											
Well	Sampled	Method	CCI ₄ <-	CHCI ₃	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFD-S													
W-1503	12-APR-12	E601	1.7	1.9	< 0.5	< 0.5	1.8	<1	0.57	2.4	< 0.5	54	< 0.5
W-1504	12-APR-12	E601	< 0.5	1.4	< 0.5	< 0.5	8.9	1.4	2.6	14	< 0.5	76	< 0.5
W-1510	12-APR-12	E601	<0.5	2.8	< 0.5	<0.5	1.8	<1	<0.5	3.2	<0.5	24	<0.5
TFD-SE													
W-314	01-MAY-12	E601	< 0.5	1.8	0.5	< 0.5	2.4	<1	0.82	4.3	< 0.5	33	< 0.5
W-2005	01-MAY-12	E601	< 0.5	0.7	< 0.5	< 0.5	2.2	<1	< 0.5	19	< 0.5	24	< 0.5
W-1308	01-MAY-12	E601	< 0.5	1.4	0.98	2.5	14	<1	<0.5	90	< 0.5	99	< 0.5
W-1403	01-MAY-12	E601	1.8	14	1.3	4.6	33	<1	3.1	73	< 0.5	290	< 0.5
W-1904	12-APR-12	E601	< 0.5	< 0.5	< 0.5	< 0.5	17	<1	< 0.5	60	< 0.5	30	< 0.5
SIP-ETC-201	12-APR-12	E601	<0.5	0.85	3.3	1.2	74	<1	<0.5	390	<0.5	250	<0.5
TFD-SS													
W-1523	12-APR-12	E601	3.3	2.4	< 0.5	1	7.5	<1	1.2	13	<0.5	100	< 0.5
W-1601	12-APR-12	E601	3.7	3.8	1.5	5.7	27	1.1	1.5	91	<0.5	260	<0.5
W-1602	12-APR-12	E601	<0.5	1.4	<0.5	<0.5	0.53	<1	<0.5	1.2	<0.5	12	7.4
W-1603	12-APR-12	E601	1.7	1.9	0.59	1.8	7	<1	<0.5	14	<0.5	94	16
TFD-W													
W-1215	04-APR-12	E601	< 0.5	6.4	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	<0.5	4.3	20
W-1216	04-APR-12	E601	<0.5	4.1	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	< 0.5	3.5	37
W-1902	04-APR-12	E601	0.56	3.1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	6	67
TFE-E													
W-566	03-APR-12	E601	0.53	3	< 0.5	< 0.5	4.1	<1	7.7	3.5	< 0.5	43	< 0.5
W-1109	03-APR-12	E601	<0.5	0.61	<0.5	<0.5	27	<1	5.2	51	<0.5	180	< 0.5
W-1903	03-APR-12	E601	<0.5	<0.5	<0.5	<0.5	25	<1	7	25	<0.5	45	<0.5
W-1909 ^b	14-NOV-11	E601	<0.5	<0.5	<0.5	<0.5	9.1	1.1	<0.5	5.4	<0.5	6.5	<0.5
W-2305	06-JUN-12	E601	<0.5	1.8	0.56	<0.5	53	<1	15	72	<0.5	200	<0.5
TFE-HS													
W-2105	05-APR-12	E601	<0.5	1.2	<0.5	<0.5	3	2.7	5.9	17	<0.5	360	<0.5
TFE-NW													
W-1211	12-APR-12	E601	< 0.5	1.4	< 0.5	< 0.5	<0.5	<1	1.2	< 0.5	<0.5	8.7	< 0.5
W-1409	12-APR-12	E601	<0.5	<0.5	<0.5	< 0.5	0.7	<1	<0.5	1.2	<0.5	21	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCI ₄	CHCI ₃	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
			<-	-	-	-	ug/L (ppb)	-	-	-	-	-	->
TFE-SE													
W-359	03-APR-12	E601	4.2	1.4	<0.5	<0.5	19	<1	6.7	8.9	<0.5	240	1.2
TFE-SW													
W-1518	04-APR-12	E601	<0.5	< 0.5	< 0.5	< 0.5	1.5	1.4	5.9	1	<0.5	12	< 0.5
W-1520	04-APR-12	E601	13	8.7	< 0.5	4.6	2.9	2.4	<0.5	17	< 0.5	350	< 0.5
W-1522	26-APR-12	E601	2.6	3	1	<0.5	7.3	16	1.9	1.7	<0.5	88	<0.5
TFE-W													
W-292	04-APR-12	E601	< 0.5	0.8	< 0.5	< 0.5	0.99	2.6	1.4	1.2	< 0.5	19	< 0.5
W-305	04-APR-12	E601	<0.5	1.2	<0.5	<0.5	2.5	<1	21	9.1	<0.5	36	0.78
TFG-1													
W-1111	11-APR-12	E601	2.7	10	<0.5	<0.5	0.86	<1	<0.5	1.1	<0.5	3.9	<0.5
TFG-N													
W-1806	11-APR-12	E601	< 0.5	0.72	< 0.5	< 0.5	< 0.5	<1	< 0.5	15	< 0.5	3.8	< 0.5
W-1807	11-APR-12	E601	<0.5	2	<0.5	<0.5	1.4	<1	1.6	18	<0.5	6.1	<0.5
TF406													
W-1309	04-APR-12	E601	0.58	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	3.1	< 0.5
W-1310	04-APR-12	E601	<0.5	0.75	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4.5	<0.5
TF406-NW													
W-1801	04-APR-12	E601	<0.5	1.2	<0.5	<0.5	<0.5	<1	4.3	0.65	<0.5	21	<0.5
TF518-Ņ ^a													
W-1410 ^b	16-JUN-11	E601	3.4	3.1	<0.5	0.66	<0.5	<1	<0.5	0.78	<0.5	26	<0.5
TF518-PZ													
W-1615	18-APR-12	E601	0.53	0.56	< 0.5	< 0.5	5.1	<1	<0.5	53	< 0.5	160	< 0.5
W-518-1913 ^b	23-MAY-11	E601	< 0.5	< 0.5	< 0.5	< 0.5	0.76	<1	<0.5	3.8	<0.5	29	<0.5
W-518-1914	18-APR-12	E601	<0.5	< 0.5	< 0.5	< 0.5	<0.5	<1	<0.5	85	< 0.5	8.3	< 0.5
W-518-1915 ^c	18-APR-12	E601	<2.5	<2.5	<2.5	<2.5	5.7	<5	<2.5	100	<2.5	1200	<2.5
SVB-518-201 ^b	07-FEB-08	E601	<0.5	< 0.5	< 0.5	< 0.5	<0.5	<1	<0.5	35	< 0.5	8.5	< 0.5
SVB-518-204 ^b	07-FEB-08	E601	<0.5	0.63	<0.5	<0.5	1.4	<1	<0.5	43	<0.5	550	<0.5
TF5475-1 ^a													
• • .					1.7	6.7	23	1.6					

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCI ₄	CHCI ₃	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	,	Freon 113	PCE -	1,1,1-TCA -	TCE -	Freon 11
TF5475-2													
W-1108	01-MAY-12	E601	2.2	21	0.7	2.8	18	<1	7.9	39	< 0.5	290	<0.5
W-1415 ^b	27-JUN-11	E601	<0.5	4.2	<0.5	<0.5	1.2	<1	<0.5	2.6	<0.5	20	<0.5
TF5475-3 ^a													
W-1604	20-JUN-12	E601	4.6	74	2.1	19	32	2.2	9.4	86	< 0.5	820	<0.5
W-1605	20-JUN-12	E601	< 0.5	22	0.51	2.4	1.4	25	< 0.5	6	< 0.5	57	<0.5
W-1608	20-JUN-12	E601	< 0.5	26	0.61	2	1.8	33	< 0.5	6.2	< 0.5	64	<0.5
W-1609	20-JUN-12	E601	<0.5	31	0.65	2.7	3.5	<1	<0.5	12	<0.5	100	< 0.5

Notes on following page.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Notes:

 CCl_4 = Carbon tetrachloride

 $CHCl_3 = Chloroform$

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

^a Treatment Facility did not operate during reporting period. Please refer to Table A-1 for details.

^b Most recent VOC sample results available.

^c Elevated detection limit due to dilution.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction	Date	Analytic											
Well	Sampled	Method	CCI ₄	CHCI ₃	1,1-DCA	1,2-DCA		1,2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
			<-	-	-	-	PPM(V/V)	-	-	-	-	-	->
VTFD-ETCS													
W-1904	11-APR-12	TO15DIT	<0.005	< 0.005	<0.005	< 0.005	0.021	<0.005	<0.005	0.36	<0.005	0.1	< 0.005
W-ETC-2003	11-APR-12	TO15DIT	<0.005	< 0.005	<0.005	< 0.005	0.0064	<0.005	<0.005	0.1	<0.005	0.038	< 0.005
W-ETC-2004A	11-APR-12		<0.005	0.012	<0.005	<0.005	<0.005	<0.005	< 0.005	0.32	<0.005	0.099	< 0.005
W-ETC-2004B		TO15DIT	<0.005	0.012	<0.005	<0.005	0.082	< 0.005	< 0.005	0.65	<0.005	0.82	<0.005
SIP-ETC-201	11-APR-12	TO15DIT	<0.005	<0.005	0.0093	<0.005	0.036	<0.005	<0.005	0.48	<0.005	0.46	<0.005
VTFD-HS ^a													
W-653 ^b	03-NOV-09	TO15DIT	0.026	< 0.005	< 0.005	<0.005	< 0.005	<0.005	0.016	<0.005	< 0.005	0.58	< 0.005
W-2011 ^b	15-FEB-07	TO15DI	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.081	< 0.005
W-2101 ^b	03-NOV-09	TO15DIT	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.052	< 0.005
W-2102 ^b	15-FEB-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.11	< 0.005
VTFE-ELM													
W-1903	17-APR-12	TO15DIT	<0.005	<0.005	0.0092	<0.005	1	0.0051	0.18	0.98	< 0.005	2.3	< 0.005
W-1909 ^b	06-OCT-11	TO15DIT	< 0.005	0.034	< 0.005	< 0.005	0.51	< 0.005	0.054	0.88	< 0.005	1.2	< 0.005
W-2305 ^b	06-OCT-11	TO15DIT	< 0.005	< 0.005	< 0.005	< 0.005	0.2	< 0.005	0.036	0.46	< 0.005	0.55	< 0.005
W-543-001	17-APR-12	TO15DIT	< 0.005	< 0.005	< 0.005	< 0.005	0.011	< 0.005	< 0.005	0.75	< 0.005	0.16	< 0.005
W-543-003	17-APR-12	TO15DIT	< 0.005	0.016	< 0.005	< 0.005	0.14	< 0.005	0.03	0.29	< 0.005	0.63	< 0.005
W-543-1908	17-APR-12	TO15DIT	< 0.005	< 0.005	< 0.005	<0.005	0.01	< 0.005	< 0.005	0.073	< 0.005	0.33	<0.005
VTFE-HS													
W-2105	12-APR-12	TO15DIT	< 0.005	0.0094	< 0.005	< 0.005	0.022	0.0067	0.094	0.29	< 0.005	3.2	< 0.005
W-ETS-2008A	12-APR-12	TO15DIT	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.026	< 0.005	0.045	< 0.005
W-ETS-2008B	12-APR-12	TO15DIT	< 0.005	0.0063	< 0.005	< 0.005	0.014	0.0076	0.028	0.68	< 0.005	1.5	< 0.005
W-ETS-2009	12-APR-12	TO15DIT	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.094	< 0.005	0.32	< 0.005
W-ETS-2010A	12-APR-12	TO15DIT	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.082	< 0.005	0.14	< 0.005
W-ETS-2010B	12-APR-12	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.062	<0.005	0.073	<0.005
VTF406-HS													
W-217	11-APR-12	TO15DIT	0.11	0.026	0.0086	< 0.005	0.71	0.01	0.098	0.71	< 0.005	1.5	0.011
W-514-2007A	11-APR-12	TO15DIT	0.17	<0.0084	<0.0084	<0.0084	0.09	<0.0084	0.15	0.054	< 0.0084	0.39	5.4
W-514-2007B	11-APR-12	TO15DIT	0.067	0.015	0.0056	<0.005	0.44	< 0.005	0.058	0.29	<0.005	1	0.1
VTF511													
W-2204	17-APR-12		0.11	0.03	< 0.0062	0.034	0.026	< 0.0062	0.0091	0.56	< 0.0062	5.1	< 0.0062
W-2205	17-APR-12	TO15DIT	0.04	0.0068	<0.005	< 0.005	0.014	<0.005	<0.005	0.12	<0.005	1.5	< 0.005
W-2206	17-APR-12	TO15DIT	0.0062	0.0092	<0.005	0.039	<0.005	<0.005	<0.005	0.15	<0.005	1.1	< 0.005
W-2207A	24-APR-12		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	< 0.005	0.012	<0.005	0.82	< 0.005
W-2207B	17-APR-12	TO15DIT	<0.005	0.0075	<0.005	<0.005	0.0068	<0.005	<0.005	0.021	<0.005	2.2	<0.005

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction	Date	Analytic		01101									
Well	Sampled	Method	CCI ₄ <-	CHCI ₃	1,1-DCA -	1,2-DCA -	1,1-DCE PPM(V/V)	1,2-DCE -	Freon 113	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
VTF511 (cont.)													
W-2208A	24-APR-12	TO15DIT	0.041	0.025	< 0.02	< 0.02	0.044	< 0.02	< 0.02	0.031	< 0.02	9.9	0.034
W-2208B	17-APR-12	TO15DIT	0.14	0.093	0.072	<0.025	0.79	0.18	0.084	0.4	<0.025	20	0.089
VTF518-PZ													
W-1615	11-APR-12	TO15DIT	0.0093	< 0.0084	< 0.0084	< 0.0084	0.41	<0.0084	0.062	1.9	< 0.0084	5.3	< 0.0084
W-518-1913	18-APR-12	TO15DIT	< 0.005	< 0.005	< 0.005	< 0.005	0.016	< 0.005	< 0.005	0.028	< 0.005	0.23	< 0.005
W-518-1914	18-APR-12	TO15DIT	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	5.2	< 0.01	0.4	< 0.01
W-518-1915	11-APR-12	TO15DIT	< 0.0084	< 0.0084	< 0.0084	< 0.0084	0.091	<0.0084	< 0.0084	4.6	< 0.0084	5.7	< 0.0084
SVB-518-201	18-APR-12	TO15DIT	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0065	< 0.005	0.021	< 0.005
SVB-518-204	18-APR-12	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.017	<0.005	0.28	<0.005
VTF5475 ^c													
W-ETS-507	20-JUN-12	TO15DIT	< 0.005	1.9	< 0.005	0.3	0.043	< 0.005	< 0.005	0.29	< 0.005	1.6	< 0.005
W-1605 ^b	06-SEP-07	TO15DI	0.0069	0.17	< 0.005	0.15	0.11	< 0.005	0.036	0.1	< 0.005	0.85	< 0.005
W-1608 ^b	06-SEP-07	TO15DI	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0061	< 0.005
W-2211	21-JUN-12	TO15DIT	0.0079	0.38	0.012	0.049	0.22	< 0.005	0.057	0.1	< 0.005	0.97	< 0.005
W-2212	21-JUN-12	TO15DIT	0.031	0.45	0.018	0.072	0.68	< 0.005	0.2	0.17	< 0.005	1.4	< 0.005
W-2302	20-JUN-12	TO15DIT	< 0.005	0.022	< 0.005	< 0.005	0.024	< 0.005	0.0055	0.039	< 0.005	0.43	< 0.005
W-2303	20-JUN-12	TO15DIT	< 0.005	0.12	<0.005	0.017	0.024	< 0.005	< 0.005	0.051	< 0.005	0.4	< 0.005
SVI-ETS-504	21-JUN-12	TO15DIT	<0.005	0.35	0.0088	<0.005	0.076	<0.005	<0.005	0.13	<0.005	0.73	<0.005

Notes on following page.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Notes:

CCl₄ = Carbon tetrachloride

 $CHCl_3 = Chloroform$

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

^a VTFD-HS did not operate during reporting period due to dual extraction well ground water pump failure.

^b Most recent VOC vapor sample results available.

^c VTF5475 did not operate during reporting period due to mixed waste disposition issues.

Table A-4. Chromium analyses of influent, effluent and receiving water samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Chromium (total) ^a mg/L (ppm)	Hexavalent Chromium mg/L (ppm)
TFB	TFB-E002	03-APR-12	0.02	NA
	TFB-E002	01-MAY-12	0.018	NA
	TFB-E002	04-JUN-12	0.019	NA
TFC	TFC-E003	04-APR-12	0.021	NA
	TFC-E003	01-MAY-12	0.02	NA
	TFC-E003	04-JUN-12	0.021	NA
TFC-E	MTU1-I	30-MAY-12	0.045	NA
	MTU1-E	05-APR-12	<0.001	NA
	MTU1-E	01-MAY-12	0.0021	NA
	MTU1-E	04-JUN-12	0.031	NA
TFC-SE	PTU1-E	03-APR-12	0.029	NA
	PTU1-E	01-MAY-12	0.029	NA
	PTU1-E	04-JUN-12	0.031	NA

^aA discharge limit of 0.050 ppm is set for total chromium during the dry season (April 1-November 30), and no limit is set for total chromium for the wet season (December 1-March 31); however, a limit of 0.022 ppm hexavalent chromium applies during the wet season. Discharge limits are defined in the Explanation of Significant Differences for metals discharge limits (April 1997).

Shaded values exceeded the discharge limit. See text for explanation.

Explanation of Abbreviations

TFA-I001 is a sampling port located immediately prior to the TFA Treatment System.

TFA-E001 is a sampling port located immediately after the TFA Treatment System, at the beginning of the discharge pipeline.

TFA receiving water is routinely sampled at the TFG-ASW location.

TFA-W-I is an influent sampling port prior to the sediment bag filter immediately following W-404.

TFA-W-E is an effluent sampling port immediately following the sediment bag filter; the water is then discharged to the Livermore Water Reclamation Plant (LWRP).

TFB-I002 is a sampling port located immediately prior to the TFB Treatment System.

TFB-E002 is a sampling port located immediately after the TFB Treatment System, at the beginning of the discharge pipeline.

TFB-R002 is a sampling station in the drainage ditch north of TFB, located approximately 75 ft downstream from the discharge point.

TFC-I003 is a sampling port located immediately prior to the TFC Treatment System.

TFC-E003 is a sampling port located immediately after the TFC Treatment System, at the beginning of the discharge pipeline.

TFC-R003 is a sampling station in Arroyo Las Positas, located approximately 75 ft downstream from the TFC discharge point.

TFD-I004 is a sampling port located immediately prior to the TFD Treatment System.

TFD-E004 is a sampling port located immediately after the TFD Treatment System, prior to discharge to the Lake Haussmann or to the underground discharge pipeline leading to Arroyo Las Positas.

TFD-R004 is now combined with and collected at the TFC-R003 location. Results are reported under TFC-R003, as approved by the RWQCB.

CRD1-I is a sampling port located immediately prior to the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1).

CRD1-E is the effluent from the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1) and then reinjected at W-1302.

CRD2-I is a sampling port located immediately prior to the catalytic columns in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2).

CRD2-E is the effluent from the last catalytic column in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2) and then reinjected at W-1610.

GTU01-I is a sampling port located immediately prior to GTU01, which is currently operating in the TFG-1 area.

GTU01-E is a sampling port located immediately after GTU01, which is currently operating in the TFG-1 area.

GTU01 receiving water is routinely sampled at the TFG-ASW location.

GTU03-I is a sampling port located immediately prior to GTU03, which is currently operating in the TF406 Northwest area.

GTU03-E is a sampling port located immediately after GTU03, which is currently operating in the TF406 Northwest area.

GTU03 receiving water is routinely sampled at the TFC-R003 location.

GTU07-I is a sampling port located immediately prior to GTU07, which is currently operating in the TFE Hotspot area.

GTU07-E is a sampling port located immediately after GTU07, which is currently operating in the TFE Hotspot area.

GTU07 receiving water is routinely sampled at the TFC-R003 location.

GTU09-I is a sampling port located immediately prior to GTU09, which is currently operating in the TF5475 area.

GTU09-E is a sampling port located immediately after GTU09, which is currently operating in the TF5475 area.

GTU09 receiving water is routinely sampled at the TFC-R003 location.

MTU02-I is a sampling port located immediately prior to MTU02, which is currently operating in the TFG North area.

MTU02-E is a sampling port located immediately after MTU02, which is currently operating in the TFG North area.

MTU02 receiving water is routinely sampled at the TFC-R003 location.

MTU03-I is a sampling port located immediately prior to MTU03, which is currently operating in the TFE Southwest area.

MTU03-E is a sampling port located immediately after MTU03, which is currently operating in the TFE Southwest area.

MTU03 receiving water is routinely sampled at the TFC-R003 location.

MTU04-I is a sampling port located immediately prior to MTU04, which is currently operating in the TFE Southeast area.

MTU04-E is a sampling port located immediately after MTU04, which is currently operating in the TFE Southeast area.

MTU04 receiving water is routinely sampled at the TFC-R003 location.

MTU05-I is a sampling port located immediately prior to MTU05, which is currently operating in the TFE West area.

MTU05-E is a sampling port located immediately after MTU05, which is currently operating in the TFE West area.

Explanation of Abbreviations

MTU05 receiving water is routinely sampled at the TFC-R003 location.

MTU1-I is a sampling port located immediately prior to MTU1, which is currently operating in the TFC East area.

MTU1-E is a sampling port located immediately after MTU1, which is currently operating in the TFC East area.

MTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU1-I is a sampling port located immediately prior to PTU-1, which is currently operating in the TFC Southeast area.

PTU1-E is a sampling port located immediately after PTU-1, which is currently operating in the TFC Southeast area.

PTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU2-I is a sampling port located immediately prior to PTU-2, which is currently operating in the TFD South area.

PTU2-E is a sampling port located immediately after PTU-2, which is currently operating in the TFD South area.

PTU2 receiving water is routinely sampled at TFC-R003 during the wet season.

PTU3-I is a sampling port located immediately prior to PTU-3, which is currently operating in the TFE East area.

PTU3-E is a sampling port located immediately after PTU-3, which is currently operating in the TFE East area.

PTU3 receiving water is routinely sampled at the TFC-R003 location.

PTU5-I is a sampling port located immediately prior to PTU-5, which is currently operating in the TF406 extraction location.

PTU5-E is a sampling port located immediately after PTU-5, which is currently operating in the TF406 extraction location.

PTU5 receiving water is routinely sampled at the TFC-R003 location.

PTU6-I is a sampling port located immediately prior to PTU-6, which is currently operating in the TFD West area.

PTU6-E is a sampling port located immediately after PTU-6, which is currently operating in the TFD West area.

PTU6 receiving water is routinely sampled at the TFC-R003 location.

PTU8-I is a sampling port located immediately prior to PTU-8, which is currently operating in the TFD East area.

PTU8-E is a sampling port located immediately after PTU-8, which is currently operating in the TFD East area.

PTU8 receiving water is routinely sampled at the TFC-R003 location.

PTU9-I is a sampling port located immediately prior to PTU-9, which is currently operating in the TFE Northwest area.

PTU9-E is a sampling port located immediately after PTU-9, which is currently operating in the TFE Northwest area.

PTU9 receiving water is routinely sampled at the TFC-R003 location.

PTU10-I is a sampling port located immediately prior to PTU-10, which is currently operating in the TFD Helipad area.

PTU10-E is a sampling port located immediately after PTU-10, which is currently operating in the TFD Helipad area.

PTU10 receiving water is routinely sampled at the TFC-R003 location.

PTU11-I is a sampling port located immediately prior to PTU-11, which is currently operating in the TFD Southeast area.

PTU11-E is a sampling port located immediately after PTU-11, which is currently operating in the TFD Southeast area.

PTU11 receiving water is routinely sampled at the TFC-R003 location.

PTU12-I is a sampling port located immediately prior to PTU-12, which is currently operating in the TFD Southshore area.

PTU12-E is a sampling port located immediately after PTU-12, which is currently operating in the TFD Southshore area.

PTU12 receiving water is routinely sampled at the TFC-R003 location.

STU06-I is a sampling port located immediately prior to STU06, which is operating in the TFA East area.

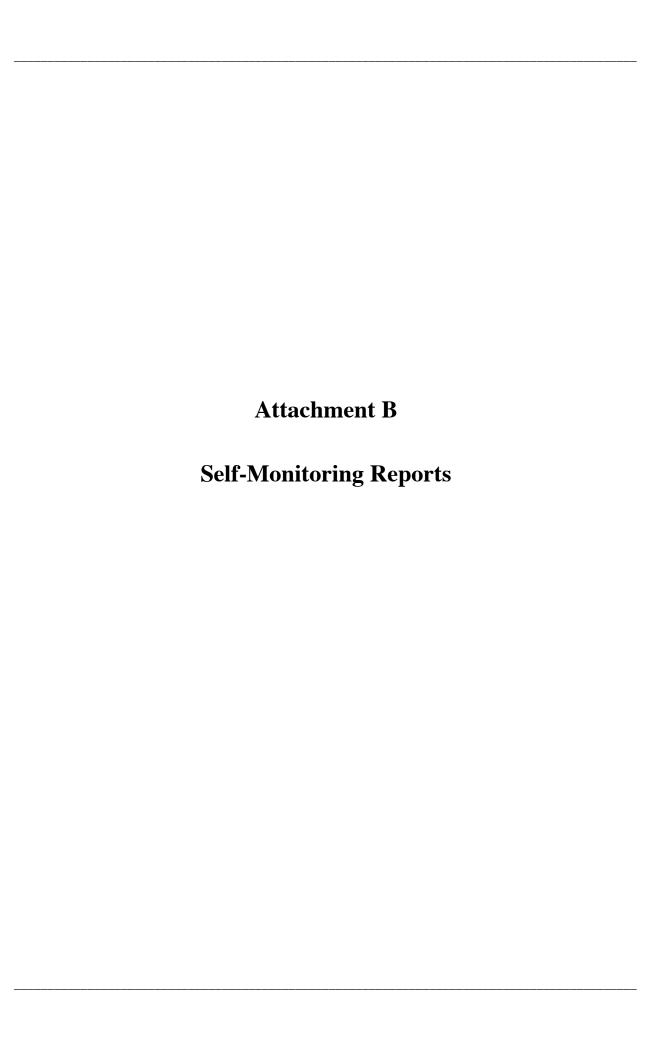
STU06-E is a sampling port located immediately after STU06, which is operating in the TFA East area.

STU06 receiving water is routinely sampled at the TFG-ASW location.

STU09-I is a sampling port located immediately prior to STU09, which is currently operating in the TF518-North area.

STU09-E is a sampling port located immediately after STU09, which is currently operating in the TF518-North area.

STU09 receiving water is routinely sampled at the TFC-R003 location.



Self-Monitoring Report LLNL Treatment Facility A (TFA) AREA TFA

- 1. Reporting Period: Business Month April Year 2012
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 718

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):

Influent pH:

Effluent pH:

Effluent Temperature (°C):

04-02-2012

7.0

7.5

17.8

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-109	1,060,900	25.0
W-262	200	0.0
W-408	438,300	10.3
W-415	1,025,700	24.1
W-457	1,013,200	24.0
W-518	187,700	4.4
W-522	659,800	15.1
W-605	371,200	8.6
W-614	463,800	10.7
W-712	271,200	6.4
W-714	345,800	7.9
W-903	666,900	14.6
W-904	1,566,000	36.0
W-1001	163,300	3.6
W-1004	484,900	11.4
W-1009	1,022,800	24.2
Total:	9,741,700	226.3

5. Discharge Information:

Discharge Location Receiving
Water Station

West Perimeter Drainage Channel TFB-R002 5,206,800

Volume 1

Self-Monitoring Report (cont'd) LLNL Treatment Facility A (TFA) AREA TFA

A	rro	yo	Se	C	0

TFG-ASW 4,534,900

6. Comments:

Facility down on 4-3-12 due to west pipeline leak fault. Restarted on 4-5-12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 04-30-2012

Self-Monitoring Report LLNL Treatment Facility A (TFA) AREA TFA

- 1. Reporting Period: Business Month May Year 2012
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 669

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):

Influent pH:

Effluent pH:

Effluent Temperature (°C):

05-01-2012

7.0

7.5

18.5

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-109	985,200	24.8
W-262	0	0.0
W-408	407,200	10.3
W-415	929,200	24.4
W-457	936,400	23.8
W-518	174,700	4.4
W-522	617,400	15.6
W-605	345,400	8.8
W-614	432,300	11.1
W-712	247,600	6.4
W-714	321,200	8.2
W-903	608,900	15.0
W-904	1,437,800	36.8
W-1001	154,600	3.8
W-1004	451,600	11.6
W-1009	951,100	24.0
Total:	9,000,600	229.0

5. Discharge Information:

Receiving Water State

<u>Discharge Location</u> <u>Water Station</u> <u>Volume</u>

West Perimeter Drainage Channel TFB-R002 4,799,500

Self-Monitoring Report (cont'd) LLNL Treatment Facility A (TFA) AREA TFA

Arroyo Seco

TFG-ASW 4,201,100

6. Comments:

System down on 5-26-12 due to low air flow. Restarted on 5-29-12. System down on 5-30-12 due to low air flow. Restarted on 5-31-12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 06-01-2012

Self-Monitoring Report LLNL Treatment Facility A (TFA) AREA TFA

1. Reporting Period: Business Month <u>June</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

June <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 </u>

Total monthly time facility operated (hours): 688

3. Monthly Compliance Data:

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-109	1,011,000	24.8
W-262	0	0.0
W-408	421,300	10.4
W-415	948,300	23.2
W-457	955,000	23.5
W-518	181,800	4.5
W-522	675,600	16.4
W-605	354,300	8.8
W-614	438,700	10.8
W-712	262,600	6.8
W-714	336,600	8.4
W-903	650,500	15.8
W-904	1,483,400	36.6
W-1001	158,300	3.8
W-1004	464,100	11.5
W-1009	981,600	24.0
Total:	<u>9,323,100</u>	<u>229.3</u>

5. Discharge Information:

<u>Discharge Location</u> <u>Water Station</u> <u>Volume</u>

West Perimeter Drainage Channel TFB-R002 4,992,900

Receiving

Self-Monitoring Report (cont'd) LLNL Treatment Facility A (TFA) AREA TFA

Arroyo Seco

TFG-ASW

4,330,200

6. Comments:

Facility down on 6-6-12 due to low air stripper flow fault. Restarted on 6-7-12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

_ Date: <u>06-29-2012</u>

Self-Monitoring Report LLNL Solar Treatment Unit 06 (STU06) AREA TFA-E

1. Reporting Per	riod: Business Mor	nth <u>April</u> Y	ear <u>2012</u>	
2. Dates (in bol	d and <u>underline</u>)	treated ground v	vater was discharge	ed
March April	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\frac{8}{3} \frac{09}{24} \frac{10}{25} \frac{11}{26} \frac{12}{27}$	13 14 15 28 29 30
Total month	ly time facility ope	erated (hours):	745	
3. Monthly Com	pliance Data:			
Influent pH: Effluent pH:		formed (m/d/y):	04-02-2012 7.0 7.0 12.8	
4. Wellfield Data	a:			
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpn	<u>1)</u>	
W-254	19,746	0.4		
Total:	19,746	0.4		
5. Discharge Info	ormation:			
Discharge	Location		Receiving Water Station	Volume
Arroyo	Seco		TFG-ASW	19,746
6. Comments:				
7. I certify that the Operator Signature	NA INT	his report, to the	•	lge, is true and correct

Self-Monitoring Report LLNL Solar Treatment Unit 06 (STU06) AREA TFA-E

	Su. Business ivioi	nth <u>May</u> Year	1 <u>2012</u>	
2. Dates (in bold	and <u>underline</u>)	treated ground wa	ater was discharged	i
May <u>(</u>	01 02 03 04 16 17 18 19	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	13 14 15 28 29 30 31
Total monthly	y time facility ope	erated (hours):	<u>630</u>	
3. Monthly Comp	liance Data:			
Influent pH: Effluent pH:	nce sampling per	formed (m/d/y):	05-01-2012 7.5 7.5 18.5	
4. Wellfield Data:				
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)		
W-254	16,980	0.4		
W-254 Total:	16,980 <u>16,980</u>	0.4 <u>0.4</u>		
	16,980			
Total:	16,980 mation:		Receiving Water Station	<u>Volume</u>
Total: 5. Discharge Infor	16,980 mation:		•	<u>Volume</u>
Total: 5. Discharge Infor	16,980 mation:		Water Station	

Self-Monitoring Report LLNL Solar Treatment Unit 06 (STU06) AREA TFA-E

1. Reporting Period: Business Month <u>June</u> Year <u>2012</u>							
2. Dates (in bold and <u>underline</u>) treated ground water was discharged							
June	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\frac{05}{20} \frac{06}{21} \frac{07}{22}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{12}{27} \frac{13}{28} \frac{14}{29} \frac{15}{29}$			
Total monthly time facility operated (hours): 430							
3. Monthly Compliance Data:							
Influent pH: Effluent pH:	nperature (°C):	formed (m/d/y	y): <u>06-01-2012</u> <u>7.0</u> <u>7.0</u> <u>20.2</u>				
Q.,	Monthly	Instantaneou					
Source	Volume(gal)	Flow Rate(g	<u>(pm)</u>				
W-254	11,408	0.4	l .				
Total:	11,408	<u>0.4</u>	<u>!</u>				
5. Discharge Info	ormation:						
Discharge Location			Receiving Water Station	Volume			
<u>Arroyo S</u>	<u>Seco</u>		TFG-ASW	11,408			
6. Comments:							
7. I certify that the information in this report, to the best of my knowledge, is true and correct. Operator Signature: Date: 06-29-2012							

Self-Monitoring Report LLNL Treatment Facility B (TFB) AREA TFB

1. Reporting Period: Business Month April Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 720

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>04-03-2012</u>
Influent pH:	7.0
Effluent pH:	7.5
Effluent Temperature (°C):	<u>17.9</u>

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-357	338,500	8.0
W-610	258,800	6.0
W-620	237,100	5.6
W-621	200	0.0
W-655	100	0.0
W-704	711,200	17.0
W-1423	208,200	4.5
W-2501	521,400	16.3
W-2502	164,400	4.7
Total:	2,439,900	<u>62.1</u>

5. Discharge Information:

<u>Discharge Location</u>

<u>Water Station</u>

<u>Water Station</u>

<u>Volume</u>

<u>West Perimeter Drainage Channel</u>

<u>TFB-R002</u>

2,439,900

6. Comments:

Facility secured on 4-18-12 to install new pumps in W-2501 and W-2502. Restarted on 4-19-12. Started W-2502 on 4-25-12. Started W-2501 on 4-27-12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd) LLNL Treatment Facility B (TFB) AREA TFB

Operator Signature: Date: 04-30-2012

Land Observation Report date: TFB-R002 - West Perimeter Drainage Channel

1.	Reporting Period: Business Month April Year 2012						
2.	Date compliance sampling performed 04-03-2012						
3.	Weather Conditions:						
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	12.04 0.41 6/ SSW					
4.	Receiving Data:						
	Sample Location pH Temperature (C) Receiving Water N/M N/M						
5.	5. Land Observations, as "Yes" or "No", for reporting month:						
	Visual Observations	<u>Effluent</u>	Receiving Water				
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No Not Required Not Required	<u>No</u> <u>No</u> <u>No</u> <u>No</u>				
6.	Comments:						
7.	I certify that the information in this report, to the best Operator Signature:	pof my knowledge, i Date: 05-09					

Self-Monitoring Report LLNL Treatment Facility B (TFB) AREA TFB

1. Reporting Period: Business Month May Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 665

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-01-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	7.5
Effluent Temperature (°C):	<u>18</u>

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
	95 H	- 1
W-357	337,500	8.2
W-610	264,900	6.5
W-620	233,100	5.2
W-621	0	0.0
W-655	0	0.0
W-704	672,300	16.9
W-1423	194,500	5.0
W-2501	272,300	16.6
W-2502	175,800	4.8
Total:	2,150,400	63.2

5. Discharge Information:

<u>Discharge Location</u>

West Perimeter Drainage Channel

Receiving
Water Station

Volume

TFB-R002
2,150,400

6. Comments:

Secured W-2501, W-2502 for well field step flow test. System down on 5-13-12 due to low air flow. Restarted on 5-14-12. Started well field step flow test on 5-16-12. System down on 5-27-12 due to low air flow. Restarted on 5-29-12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd) LLNL Treatment Facility B (TFB) AREA TFB

Operator Signature:

Date: 06-01-2012

Land Observation Report date: TFB-R002 - West Perimeter Drainage Channel

1.	Reporting Period: Business Month May Year 2012		
2.	Date compliance sampling performed <u>05-01-2012</u>		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	14.71 0.44 5/ SSW	
4.	Receiving Data:		
	Sample Location pH Temperature (C)		
	Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting n	nonth:	
	Visual Observations	<u>Effluent</u>	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No No Not Required Not Required	<u>No</u> <u>No</u> <u>No</u> <u>No</u>
6.	Comments:		
7.	I certify that the information in this report, to the bes	7	
	Operator Signature:	Date: <u>06-0</u>	<u>0-2U12</u>

Self-Monitoring Report LLNL Treatment Facility B (TFB) AREA TFB

1. Reporting Period: Business Month June Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

June 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): <u>678</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-04-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.3</u>

4. Wellfield Data:

	Monthly	Instantaneous
Source Source	Volume(gal)	Flow Rate(gpm)
W 255	242 (00	0.4
W-357	342,600	8.4
W-610	251,100	6.5
W-620	223,200	5.7
W-621	0	0.0
W-655	0	0.0
W-704	694,300	17.2
W-1423	196,200	4.7
W-2501	649,900	19.0
W-2502	204,300	5.1
Total:	2,561,600	66.6

5. Discharge Information:

Discharge LocationReceiving
Water StationVolumeWest Perimeter Drainage ChannelTFB-R0022,561,600

6. Comments:

Facility down on 6-24-12 due to low air stripper flow fault. Restarted on 6-25-12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-29-2012

Land Observation Report date: TFB-R002 - West Perimeter Drainage Channel

1.	Reporting Period: Business Month <u>June</u> Year <u>2012</u>		
2.	Date compliance sampling performed <u>06-04-2012</u>		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	17.8 0.13 6/ SW	
4.	Receiving Data:		
	Sample Location pH Temperature (C) Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting i	month:	
	Visual Observations	<u>Effluent</u>	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No No Not Required Not Required	<u>No</u> <u>No</u> <u>No</u> <u>No</u>
6.	Comments:		
7.	I certify that the information in this report, to the bes		s true and correct.
	Operator Signature: Star Choagus	Date: <u>07-0</u>	6-2012

Self-Monitoring Report LLNL Treatment Facility C (TFC) AREA TFC

1. Reporting Period: Business Month April Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

March April 31 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 755

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	04-04-2012
Influent pH:	7.5
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	18.7

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-701	616,648	13.8
W-1015	201,772	4.6
W-1102	178,522	4.0
W-1103	117,386	2.6
W-1104	1,218,320	27.3
W-1116	74,577	1.8
Total:	2,407,225	<u>54.1</u>

5. Discharge Information:

Arroyo Las Positas	TFC-R003	2,407,225
Discharge Location	Receiving Water Station	Volume

6. Comments:

Secured hexavalent chromium treatment on 4-2-12. End of wet season.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 04-30-2012

Land Observation Report date: TFC-R003 - Arroyo Las Positas

I.	Reporting Period: Business Month April Year 2012		
2.	Date compliance sampling performed <u>04-04-2012</u>		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	11.46 0.41 6/SW	
4.	Receiving Data:		
	Sample Location pH Temperature (C) Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting r	nonth:	
	Visual Observations	<u>Effluent</u>	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No Not Required Not Required	<u>No</u> <u>No</u> <u>No</u> <u>No</u>
6.	Comments:		
7.	I certify that the information in this report, to the bes		s true and correct.

Self-Monitoring Report LLNL Treatment Facility C (TFC) AREA TFC

1. Reporting Period: Business Month May Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 </u>

Total monthly time facility operated (hours): 755

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-01-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18.8</u>

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-701	616,552	13.8
W-1015	203,392	4.8
W-1102	173,684	3.9
W-1103	121,077	2.7
W-1104	1,220,136	27.4
W-1116	82,688	1.8
Total:	2,417,529	54.4

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arrovo Las Positas	TFC-R003	2,417,529

6. Comments:

7. I certify that the in	formation in th	is report, to the	e best of m	ny knowledge, is true and cor	rect.
Operator Signature: _	SIM	Cawas	ily.	ny knowledge, is true and cor Date: <u>06-01-2012</u>	

Land Observation Report date: TFC-R003 - Arroyo Las Positas

Reporting Period: Business Month May Year 2	012	
Date compliance sampling performed <u>05-01-20</u>	<u>12</u>	
Weather Conditions:		
Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	14.71 0.44 5/ SSW	
Receiving Data:		
Sample Location pH Temperature (C) Receiving Water N/M N/M		
Land Observations, as "Yes" or "No", for reporting	ng month:	
Visual Observations	Effluent	Receiving Water
Floating and Suspended Materials of Waste Orig Odor Discoloration and Turbidity Evidence of Beneficial Water Use	in <u>No</u> <u>No</u> Not Required Not Required	<u>No</u> <u>No</u> <u>No</u> <u>No</u>
Comments:		
I certify that the information in this report, to the Operator Signature:	best of my knowledge, Date: 06-0	
	Date compliance sampling performed 05-01-20. Weather Conditions: Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph): Receiving Data: Sample Location pH Temperature (C) Receiving Water N/M N/M Land Observations, as "Yes" or "No", for reporting the Visual Observations Floating and Suspended Materials of Waste Origonal Odor Discoloration and Turbidity Evidence of Beneficial Water Use Comments: I certify that the information in this report, to the	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph): Receiving Data: Sample Location pH Temperature (C) Receiving Water N/M N/M Land Observations, as "Yes" or "No", for reporting month: Visual Observations Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use Comments: I certify that the information in this report, to the best of my knowledge, in the second of t

Self-Monitoring Report LLNL Treatment Facility C (TFC) AREA TFC

1. Reporting Period: Business Month <u>June</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

June 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 706

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):

Influent pH:

Effluent pH:

Effluent Temperature (°C):

06-04-2012

7.0

7.5

20.4

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-701	574,552	13.8
W-1015	186,360	4.3
W-1102	161,000	3.9
W-1103	115,908	2.7
W-1104	1,144,472	27.3
W-1116	78,670	1.9
Total:	2,260,962	53.9

5. Discharge Information:

Discharge Location Receiving
Water Station Volume

Arroyo Las Positas TFC-R003 2,260,962

6. Comments:

7. I certify that the information in this report, to the best-of my knowledge, is true and correct.

Operator Signature: Date: 06-29-2012

Land Observation Report date: TFC-R003 - Arroyo Las Positas

1.	Reporting Period: Business Month June Year 2012	_	
2.	Date compliance sampling performed <u>06-04-2012</u>		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	17.8 0.13 6/ SW	
4.	Receiving Data:		
	Sample Location pH Temperature (C) Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting r	month:	
	Visual Observations	Effluent	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No No Not Required Not Required	<u>No</u> <u>No</u> <u>No</u> <u>No</u>
6.	Comments:		
7.	I certify that the information in this report, to the best Operator Signature:	t of my knowledge, i Date: 07-0	

Self-Monitoring Report LLNL Mini Treatment Unit 1 (MTU1) AREA TFC-E

1. Reporting Period: Business Month April Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

March April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): <u>595</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):

Influent pH:

Effluent pH:

Effluent Temperature (°C):

04-05-2012

7.0

7.5

19.5

4. Wellfield Data:

Monthly Source Volume(gal)		Instantaneous Flow Rate(gpm)
W-368 W-413	120,617 592,757	3.5 16.4
Total:	713,374	<u>19.9</u>

5. Discharge Information:

<u>Discharge Location</u>

Provo Las Positas

Receiving

Water Station

Volume

TFC-R003

713,374

6. Comments:

Facility was down waiting for resin order.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 04-30-2012

Self-Monitoring Report LLNL Mini Treatment Unit 1 (MTU1) AREA TFC-E

1. Reporting Period: Business Month May Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 742

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-01-2012</u>
Influent pH:	7.0
Effluent pH:	7.5
Effluent Temperature (°C):	<u>19.7</u>

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-368 W-413	138,714 732,403	3.1 16.4
Total:	<u>871,117</u>	19.5

5. Discharge Information:

Arroyo Las Positas	TFC-R003	871,117
Discharge Location	Water Station	Volume

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _______ Date: <u>06-01-2012</u>

Self-Monitoring Report LLNL Mini Treatment Unit 1 (MTU1) AREA TFC-E

1. Reporting Period: Business Month June Year 2012 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged June Total monthly time facility operated (hours): 667 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 06-04-2012 Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm) W-368 125,211 3.5 W-413 659,958 16.4 Total: 785,169 19.9 5. Discharge Information: Receiving Discharge Location Water Station <u>Volume</u> Arroyo Las Positas **TFC-R003** <u>785,169</u> 6. Comments: 7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Camp Vang

Self-Monitoring Report LLNL Portable Treatment Unit 1 (PTU1) AREA TFC-SE

1. Reporting Per	iod: Business Month Apri	Year <u>2012</u>				
2. Dates (in bol	d and underline) treated gro	ınd water was discharg	ged			
March April	31 01 02 03 04 05 06 0 16 17 18 19 20 21 2	$\frac{7}{2}$ $\frac{08}{23}$ $\frac{09}{24}$ $\frac{10}{25}$ $\frac{11}{26}$ $\frac{1}{2}$	2 <u>13 14 15</u> 7 <u>28 29 30</u>			
Total month	ly time facility operated (hou	s): <u>755</u>				
3. Monthly Com	pliance Data:					
Influent pH: Effluent pH	Date compliance sampling performed (m/d/y): Influent pH: Effluent pH: T.5 Effluent Temperature (°C):					
4. Wellfield Data	a:					
Source	Monthly Instantane Volume(gal) Flow Rate					
W-1213 W-2201		.1 .2				
Total:	771,149 17	.3				
5. Discharge Info	ormation:					
Discharge	Location	Receiving Water Station	Volume			
Arroyo	Las Positas	TFC-R003	771,149			
6. Comments: Hexavalent chromium treatment secured on 4-2-12. End of wet season.						
7. I certify that the information in this report, to the best of my knowledge, is true and correct.						
Operator Signatu	re: Scott Garage	Date: (<u>04-30-2012</u>			

Self-Monitoring Report LLNL Portable Treatment Unit 1 (PTU1) AREA TFC-SE

1. Reporting Period	l: Business Mor	nth <u>May</u>	Year	<u>2012</u>						
2. Dates (in bold a	nd <u>underline</u>)	treated gro	ound wa	ter was	discha	rged	l			
May <u>01</u>	<u>1</u> <u>02</u> <u>03</u> <u>04</u> <u>19</u>	$\frac{05}{20} \frac{06}{21} \frac{0}{21}$	07 <u>08</u> 22 <u>23</u>	<u>09</u> <u>10</u> <u>25</u>	11 26	<u>12</u> <u>27</u>	13 28	14 29	15 30 31	
Total monthly	time facility ope	erated (hou	rs): _	<u>754</u>						
3. Monthly Compli	ance Data:									
Date compliant Influent pH: Effluent pH: Effluent Tempe 4. Wellfield Data:		formed (m	/d/y):	<u>05-01</u>	7.0 7.5 21.4					
Source	Monthly Volume(gal)	Instantan Flow Rat								£6
W-1213 W-2201	223,205 546,859		5.0 2.5							
Total:	770,064	1	7.5							
5. Discharge Inform	nation:									
Discharge Lo	cation			Receiv Water	_	<u>1</u>	$\underline{\mathbf{v}}$	olume	2	
Arroyo Las	s Positas			TFC	-R003		7	70,06	<u>4</u>	
6. Comments:										
7. I certify that the i	1	his report,	to the bo	est-pf m	y know Date				and corr	ect.
			1							

Self-Monitoring Report LLNL Portable Treatment Unit 1 (PTU1) AREA TFC-SE

1. Reporting Per	nod: Business Mon	ith <u>June</u>	Y ear <u>2012</u>			
2. Dates (in bol	d and underline)	treated groun	d water was disc	charged		
June	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{05}{20} \frac{06}{21} \frac{07}{22}$	$\frac{08}{23} \frac{09}{24} \frac{10}{25} \frac{1}{2}$	$\frac{1}{6} \frac{12}{27}$	13 14 15 28 29	
Total month	ly time facility ope	erated (hours)	<u>706</u>			
3. Monthly Com	pliance Data:					
Influent pH: Effluent pH:		formed (m/d/		12 7.0 7.5 0.9		
4. Wellfield Dat	a:					
Source	Monthly Volume(gal)	Instantaneous Flow Rate(g				
W-1213 W-2201	188,147 511,682	4.6 12.4				
Total:	699,829	17.0				
5. Discharge Info	ormation:					
Discharge	Location		Receiving Water Stat	<u>ion</u>	Volume	
Arroyo	Las Positas		TFC-R0	<u>03</u>	699,829	
6. Comments:						
7. I certify that the	ne information in the	nis report, to t			e, is true and 29-2012	l correct.

Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month April Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

March 31
April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): <u>251</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>04-19-2012</u>
Influent pH:	7.5
Effluent pH:	7.5
Effluent Temperature (°C):	<u>21.3</u>

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-351	19 600	1.3
	18,600	1.2
W-653	2,200	2.0
W-906	64,900	4.5
W-907-2	156,300	10.6
W-2011	5,400	2.5
W-2101	3,800	2.5
W-2102	6,500	2.6
W-1206	58,400	4.2
W-1208	362,300	24.2
Total:	678,400	54.3

5. Discharge Information:

Discharge Location	Receiving Water Station	<u>Volume</u>
Arroyo Las Positas	_TFC-R003	<u>678,400</u>
TFD irrigation supply	TFD-IRR	_0

6. Comments:

Completed air stripper descaling. Restarted facility on 4-19-11. Secured W-2011 on 4-28-12 due to flow problems. System went down on 4-29-12 due to high stripper level. Restarted on 4-30-12.

Self-Monitoring Report (cont'd) LLNL Treatment Facility D (TFD) AREA TFD

7. I certify that the in	formation in this	s report, to the best of	my knowledge, is true and co	orrect.
Operator Signature:	Shu	- Cawagu C	Date: <u>04-30-2012</u>	

Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month May Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 752

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-01-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	21.3

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-351	47,800	1.2
W-653	5,700	3.0
W-906	199,100	4.4
W-907-2	410,500	9.7
W-2011	8,300	3.0
W-2101	10,800	3.0
W-2102	17,700	3.0
W-1206	166,800	4.0
W-1208	1,091,600	24.4
Total:	1,958,300	<u>55.7</u>

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume		
Arroyo Las Positas	TFC-R003	1,958,300		
TFD irrigation supply	TFD-IRR	_0		

6. Comments:

W-351 secured on 5-11-12. W-2011 and W-351 started on 5-15-12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd) LLNL Treatment Facility D (TFD) AREA TFD

Operator Signature: Date: 06-01-2012

Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month <u>June</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

June 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 702

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 06-01-2012
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 22.3

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-351	52,900	1.2
W-653	4,900	3.0
W-906	185,200	4.5
W-907-2	411,800	8.9
W-2011	13,900	3.0
W-2101	9,400	3.0
W-2102	14,400	3.0
W-1206	239,200	3.6
W-1208	1,003,000	24.3
Total:	1,934,700	54.5

5. Discharge Information:

Discharge Location	Water Station	Volume		
Arroyo Las Positas	<u>TFC-R003</u>	1,934,700		
TFD irrigation supply	TFD-IRR	_0		

Receiving

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd) LLNL Treatment Facility D (TFD) AREA TFD

Date: 06-29-2012

Self-Monitoring Report LLNL Portable Treatment Unit 8 (PTU8) AREA TFD-E

- 1. Reporting Period: Business Month April Year 2012
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

March	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21
	22	23	24	25	26	27	28	29	30	31					
April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-2006	0	0.0
W-1301	0	0.0
W-1303	0	0.0
W-1306	0	0.0
W-1307	0	0.0
W-2203	0	0.0
W-1550	0	0.0
Total:	<u>0</u>	0.0

5. Discharge Information:

Discharge Location	Water Station	Volume	
Arroyo Las Positas	TFC-R003	0	

6. Comments:

Facility down for facility and well head upgrades. Facility did not run in the month of April.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-08-2012

Self-Monitoring Report LLNL Portable Treatment Unit 8 (PTU8) AREA TFD-E

1. Reporting Period: Business Month May Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 2

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-31-2012</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	26.8

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-2006	25	0.5
W-1301	175	4.6
W-1303	317	5.9
W-1306	63	0.7
W-1307	827	9.8
W-1550	129	1.1
W-2203	46	0.3
Total:	1,582	22.9

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	<u>Volume</u>
Arroyo Las Positas	TFC-R003	1,582

6. Comments:

Start up testing and operations of upgraded system.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-13-2012

Self-Monitoring Report LLNL Portable Treatment Unit 8 (PTU8) AREA TFD-E

- 1. Reporting Period: Business Month June Year 2012
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

June 01 02 03 04 <u>05</u> 06 07 08 09 10 <u>11</u> <u>12</u> <u>13</u> <u>14</u> <u>15</u> 16 17 <u>18</u> 19 20 21 22 23 24 <u>25</u> <u>26</u> <u>27</u> <u>28</u>

Total monthly time facility operated (hours): 113

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-01-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>22.1</u>

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-2006	742	0.0
W-1301	17,855	4.6
W-1303	30,542	5.9
W-1306	4,598	0.7
W-1307	69,267	9.8
W-1550	7,976	1.1
W-2203	3,007	0.3
Total:	133,987	22.4

5. Discharge Information:

Arroyo Las Positas	TFC-R003	133,987	
Discharge Location	Receiving <u>Water Station</u>	Volume	

6. Comments:

System was down for testing and verification.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-12-2012

Self-Monitoring Report LLNL Portable Treatment Unit 10 (PTU10) AREA TFD-HPD

1. Reporting Period: Business Month _April Year 2012

2. Dates (in **bold** and underline) treated ground water was discharged

March 31

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

16 17 **18 19 20** 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): <u>52</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-18-2012

Influent pH:

Effluent pH: 7.5

Effluent Temperature (°C): 22.7

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)		
W-1254	15,527	5.0		
Total:	15,527	5.0		

5. Discharge Information:

<u>Discharge Location</u>

Receiving

<u>Water Station</u>

<u>Volume</u>

Arroyo Las Positas TFC-R003 15,527

6. Comments:

The facility was restarted on 4-18-12 after a redesign of the wellhead and installation of a new pump at W-1254. After the restart the facility was shutdown until PTU2 was up and running in a steady state condition.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-22-2012

Self-Monitoring Report LLNL Portable Treatment Unit 10 (PTU10) AREA TFD-HPD

1.	Reporting	Period:	Business Month	May	Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May	01	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	21	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	26	27	28	<u>29</u>	<u>30</u>	<u>31</u>

Total monthly time facility operated (hours): 609

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-02-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20.2</u>

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)		
W-1254	218,256	5.0		
Total:	218,256	5.0		

5. Discharge Information:

	Receiving		
Discharge Location	Water Station	Volume	
Arroyo Las Positas	TFC-R003	218 256	

6. Comments:

The facility was shut down at 14:13 on 5/25/12 for a planned power outage in the area. The facility was restarted on 5-29-12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-27-2012

Self-Monitoring Report LLNL Portable Treatment Unit 10 (PTU10) AREA TFD-HPD

1. Reporting Period: Business Month June Year 2012

2. Dates (in bol	2. Dates (in bold and <u>underline</u>) treated ground water was discharged													
June	01 02 16 17		04 05 19 20										<u>15</u>	
Total month	ly time	facility	operat	ed (ho	ours)	: _	<u>703</u>							
3. Monthly Com	pliance	Data:												
Date compliance sampling performed (m/d/y): Influent pH: Effluent pH: T.5 Effluent Temperature (°C): 06-04-2012 7.5 20.8														
4. Wellfield Date	a:													
Source		nthly ume(g		istanta low R										
W-1254		220,7	05		5.3	3								
Total:		220,7	<u>05</u>		<u>5.3</u>	3								
5. Discharge Info	ormatio	n:					В							
Discharge	Location	<u>on</u>						eivii ter S	_	<u>n</u>	Ž	/olu	<u>me</u>	
Arroyo	Las Pos	sitas					<u>T</u>	FC-	R003	3	2	20,7	<u>′05</u>	
6. Comments: NA														
7. I certify that the information in this report, to the best of my knowledge, is true and correct.														
Operator Signature: Bly D. Hull J Date: 07-17-2012														

Self-Monitoring Report LLNL ISB01 (ISB01) AREA TFD-HPD

- 1. Reporting Period: Business Month April Year 2012
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

March 31
April 01 <u>02</u> <u>03</u> 04 <u>05</u> 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 <u>23</u> <u>24</u> <u>25</u> <u>26</u> <u>27</u> 28 29 <u>30</u>

Total monthly time facility operated (hours): 35

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-1650	403	2.6
W-1653	363	1.3
W-1655	348	1.4
W-1657	375	1.5
Total:	<u>1,489</u>	<u>6.8</u>

5. Discharge Information:

Discharge Location	Water Station	<u>Volume</u>	
ISB01 injection well	<u>W-1552</u>	_1,489	

Deceiving

6. Comments:

Compliance sampling is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system, but it was not treated. The recorded flowrate readings were taken when the facility was running in the lactate injection mode. The facility has been running in a cyclic mode since 02-3-12. The facility shut down several times and was down for several days due to system high pressure alarm activations. The facility was also down for setup for redevelopment of extraction wells. Approximately 200 gallons of water were recirculated in each of the extraction wells on April 23 for well redevelopment but the water was not injected into W-1552.

Self-Monitoring Report (cont'd) LLNL ISB01 (ISB01) AREA TFD-HPD

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 06-26-2012

Self-Monitoring Report LLNL ISB01 (ISB01) AREA TFD-HPD

1. Reporting Period: Business Month May Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 45

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1650	242	2.2
W-1653	196	1.6
W-1655	196	1.6
W-1657	215	2.1
Total:	849	7.6

5. Discharge Information:

Discharge Location	Water Station	Volume	
ISB01 injection well	_W-1552	_849	

6. Comments:

Compliance sampling is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system, but it was not treated. The recorded flowrate readings were taken when the facility was running in the lactate injection mode. The facility has been running in a cyclic mode since 02-3-12. The facility shut down several times and was down for several days due to system high pressure alarm activations. The facility did not operate from 5/16/12 thru 5/31/12 due to a system high pressure alarm, removal of W-1552 hardware to install a new check valve at a new depth, completion of SOP 3.2, and a planned power outage in the area.

Self-Monitoring Report (cont'd) LLNL ISB01 (ISB01) AREA TFD-HPD

7. I certify that the information	in this	report, to	the best	of my k	nowledge, is t	rue and correct.
P. 00						

Self-Monitoring Report LLNL ISB01 (ISB01) AREA TFD-HPD

1. Reporting Period: Business Month <u>June</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

June 01 02 03 <u>04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 </u>

Total monthly time facility operated (hours): _589

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-1650	690	2.5
W-1653	320	0.6
W-1655	703	2.6
W-1657	866	3.3
Total:	2,579	9.0

5. Discharge Information:

Discharge Location	Water Station	Volume	
ISB01 injection well	W-1552	2,579	

6. Comments:

The facility was restarted at 1317 on 6-4-12, after the Memorial Day holiday/weekend. The facility was shut down at 1142 on 6-27-12 and restarted at 0942 on 6-28-12. Compliance sampling is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system, but it was not treated. The recorded flowrate readings were taken when the facility was running in the lactate injection mode. Injection of sodium lactate began on 6-21-12 and continued for the rest of the month.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd) LLNL ISB01 (ISB01) AREA TFD-HPD

Self-Monitoring Report LLNL Portable Treatment Unit 2 (PTU2) AREA TFD-S

1. Reporting Period: Business Month April Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): _593

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>04-12-2012</u>
Influent pH:	7.0
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	21.3

4. Wellfield Data:

	Source Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
	W-1503	369,176	10.6
	W-1504	272,988	7.7
	W-1510	178,611	5.0
,	Total:	820,775	23.4

5. Discharge Information:

Arrovo Las Positas	TEC-PAA3	920 77 <i>5</i>	
Discharge Location	Receiving Water Station	Volume	

6. Comments:

April 2012 system down time due electronic trouble shooting and maintenance.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Multiple Date: 05-01-2012

Self-Monitoring Report LLNL Portable Treatment Unit 2 (PTU2) AREA TFD-S

1. Reporting Period: Business Month <u>May</u> Year <u>2012</u>

2. Dates (in bold and $\underline{underline}$) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): <u>656</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-07-2012</u>
Influent pH:	7.0
Effluent pH:	7.0
Effluent Temperature (°C):	<u>21.5</u>

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-1503	448,704	11.4
W-1504	305,664	7.8
W-1510	200,736	5.0
Total:	955,104	24.2

5. Discharge Information:

Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	<u>955,104</u>

Receiving

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-06-2012

Self-Monitoring Report LLNL Portable Treatment Unit 2 (PTU2) AREA TFD-S

1. Reporting Period: Business Month June Year 2012 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged June <u>01</u> <u>02</u> <u>03</u> <u>04</u> <u>05</u> <u>06</u> <u>07</u> <u>08</u> <u>09</u> <u>10</u> <u>11</u> <u>12</u> <u>13</u> <u>14</u> <u>15</u> <u>16</u> <u>17</u> <u>18</u> <u>19</u> <u>20</u> <u>21</u> <u>22</u> <u>23</u> <u>24</u> <u>25</u> <u>26</u> <u>27</u> <u>28</u> <u>29</u> Total monthly time facility operated (hours): 701 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 06-07-2012 Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm) 475,278 W-1503 11.3 W-1504 320,772 7.6 W-1510 209,879 4.9 Total: 1,005,929 **23.8** 5. Discharge Information: Receiving Discharge Location Water Station **Volume** Arroyo Las Positas TFC-R003 1,005,929 6. Comments: 7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Date: 07-02-2012

Operator Signature:

Self-Monitoring Report LLNL Portable Treatment Unit 11 (PTU11) AREA TFD-SE

1. Reporting Period: Business Month April Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 777

3. Monthly Compliance Data:

Date compliance sampling performed $(m/d/y)$:		04-04-2012
Influent pH:	Yan	7.0
Effluent pH:		<u>7.5</u>
Effluent Temperature (°C):		16.8

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-314	464,848	10.1
W-2005	0	0.0
W-1308	161,407	3.5
W-1403	67,745	1.4
W-1904	0	0.0
SIP-ETC-201	0	0.0
Total:	694,000	15.0

5. Discharge Information:

Arroyo Las Positas	TFC-R003	694,000
Discharge Location	Receiving Water Station	Volume

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _______ Date: 04-30-2012

Self-Monitoring Report LLNL Portable Treatment Unit 11 (PTU11) AREA TFD-SE

1. Reporting Period: Business Month May Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 </u>

Total monthly time facility operated (hours): 742

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	05-01-2012
Influent pH:	7.0
Effluent pH:	7.5
Effluent Temperature (°C):	<u>17.2</u>

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-314	445,200	10.1
W-2005	0	0.0
W-1308	155,820	3.5
W-1403	64,554	1.4
W-1904	0	0.0
SIP-ETC-201	0	0.0
Total:	665,574	15.0

5. Discharge Information:

Disenting Docution	water Station	v Orunie
Discharge Location	Water Station	Volume

Daggiving

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-01-2012

Self-Monitoring Report LLNL Portable Treatment Unit 11 (PTU11) AREA TFD-SE

1. Reporting Period: Business Month <u>June</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

June 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 704

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-04-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	16.9

4. Wellfield Data:

	Monthly	Instantaneous	
Source	Volume(gal)	Flow Rate(gpm)	
W-314	401,515	9.6	
W-2005	0	0.0	
W-1308	118,094	3.0	
W-1403	63,897	1.4	
W-1904	0	0.0	
SIP-ETC-201	0	0.0	
Total:	583,506	<u>14.1</u>	

5. Discharge Information:

Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	583,506

Receiving

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-12-2012

Self-Monitoring Report LLNL Portable Treatment Unit 12 (PTU12) AREA TFD-SS

1. Reporting Period: Business Month	<u>April</u>	Year 2012
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2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

 March
 31

 April
 01
 02
 03
 04
 05
 06
 07
 08
 09
 10
 11
 12
 13
 14
 15

 16
 17
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 19
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 29
 30

Total monthly time facility operated (hours): 757

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>04-12-2012</u>
Influent pH:	7.0
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	19.5

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-1523	302,281	6.7
W-1601	44,825	1.0
W-1602	182,507	4.1
W-1603	626,367	14.1
Total:	1,155,980	25.9

5. Discharge Information:

Arroyo Las Positas	TFC-R003	1,155,980
Discharge Location	Water Station	Volume

6. Comments:

7. I certify that the information Operator Signature:	in this report, to the best of	f my knowledge, is true and co	orrect.
Mary 1			
Operator Signature: //////	100	Date: 05-01-2012	

Self-Monitoring Report LLNL Portable Treatment Unit 12 (PTU12) AREA TFD-SS

1. Reporting Period: Business Month May Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 </u>

Total monthly time facility operated (hours): 749

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	05-07-2012
Influent pH:	7.0
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	19.8

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1523	295,802	6.5
W-1601	43,088	0.9
W-1602	179,170	3.9
W-1603	587,839	13.2
Total:	1,105,899	24.5

5. Discharge Information:

Arroyo Las Positas	TFC-R003	1 105 200	
Discharge Location	Water Station	<u>Volume</u>	
	Receiving		

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report LLNL Portable Treatment Unit 12 (PTU12) AREA TFD-SS

1. Reporting Period: Business Month <u>June</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

June 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 701

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-08-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>20</u>

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-1523	271,851	6.6
W-1601	39,876	0.9
W-1602	166,069	4.0
W-1603	540,328	13.0
Total:	1,018,124	24.5

5. Discharge Information:

Discharge Location	Water Station	Volume
Arrovo Las Positas	TFC-R003	1.018.124

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Mult Date: 07-02-2012

Self-Monitoring Report LLNL Portable Treatment Unit 6 (PTU6) AREA TFD-W

1. Reporting Period: Business Month April Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 751

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):

Influent pH:

Effluent pH:

Effluent Temperature (°C):

04-04-2012

7.5

7.5

23.2

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-1215	428,535	9.7
W-1216	458,920	10.2
W-1902	807,438	18.2
Total:	1,694,893	38.1

5. Discharge Information:

Pischarge Location Receiving
Water Station Volume

Arroyo Las Positas TFC-R003 1,694,893

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-09-2012

Self-Monitoring Report LLNL Portable Treatment Unit 6 (PTU6) AREA TFD-W

1. Reporting Period: Business Month May Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 753

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-02-2012</u>
Influent pH:	<u>7.3</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>22.7</u>

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-1215	426,707	9.8
W-1216	462,067	10.2
W-1902	809,384	18.3
Total:	1,698,158	38.3

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	1,698,158

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-13-2012

Self-Monitoring Report LLNL Portable Treatment Unit 6 (PTU6) AREA TFD-W

1. Reporting Period: Business Month <u>June</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

June 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 699

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):

Influent pH:

Effluent pH:

Effluent Temperature (°C):

06-14-2012

7.0

7.5

22.9

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-1215	401,186	9.7
W-1216	428,972	10.3
W-1902	751,587	18.1
Total:	1,581,745	38.1

5. Discharge Information:

<u>Discharge Location</u>

Receiving

<u>Water Station</u>

<u>Volume</u>

Arroyo Las Positas TFC-R003 1,581,745

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-17-2012

Self-Monitoring Report LLNL Vapor Extraction System 11 (VES11) AREA VTFD-ETCS

1. Reporting Period: Business Month April Year 2012

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

3. Wellfield Data:

Source	Monthly Volume(cu. ft)	Instantaneous Flow Rate(scfm)	P(in. Hg)		Hours of Op.	
W-1904	633	0.0	0	0	1	
W-ETC-2003	607,327	13.9	-1.04	68	733	
W-ETC-2004	A 194,347	4.2	-5.82	68	733	
W-ETC-2004	B 679,102	17.4	-4.89	68	733	
SIP-ETC-201	433	0.0	0	0	· 1	
Total:	1,481,842	35.5				

4. Comments:

Facility operations secured 4/24 at 06:30 hrs to perform modifications to facility inlet piping. Facility was restarted 4/25 at 07:10 hrs.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-21-2012

Self-Monitoring Report LLNL Vapor Extraction System 11 (VES11) AREA VTFD-ETCS

1. Reporting Period: Business Month <u>May</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 </u>

3. Wellfield Data:

I	Monthly	Instantaneous			Hours
Source	Volume(cu. ft	Flow Rate(scfm)	P(in. Hg)	T(°F)	of Op.
W-1904	0	0.0	0	0	0
W-ETC-2003	563,160	12.9	95	68	751
W-ETC-2004	270,188	5.2	-5.11	68	751
W-ETC-2004I	3 737,386	16.9	-4.27	68	751
SIP-ETC-201	0	0.0	0	0	0
Total:	1,570,734	35.0			

4. Comments:

Facility secured 5/15/12 at 10:05 hrs. to install BCS system. Facility was restarted 5/15 at 10;35 HRS.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-04-2012

Self-Monitoring Report LLNL Vapor Extraction System 11 (VES11) AREA VTFD-ETCS

- 1. Reporting Period: Business Month <u>June</u> Year <u>2012</u>
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

June <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15</u> <u>16 17 18 19 20 21 22 23 24 25 26 27 28</u>

3. Wellfield Data:

	Monthly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-1904	0	0.0	0	0	0
W-ETC-2003	480,081	11.3	88	82	665
W-ETC-2004.	A 177,602	3.5	-3.96	82	665
W-ETC-2004	B 641,673	15.3	-3.48	82	665
SIP-ETC-201	0	0.0	0	0	0
Total:	1,299,356	30.0			

4. Comments:

Facility shutdown 6/17/12 at 19:25, cause shutdown unknown. Facility was restarted 6/18/12 @ 08:15 hrs.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-05-2012

Self-Monitoring Report LLNL Vapor Extraction System 13 (VES13) AREA VTFD-HS

1. Reporting Period: Business Month April Year 2012

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

March 30 31 April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

	Monthly	Instantaneous		H	Iours
Source	Volume(cu. ft)	Flow Rate(scfm)	<u>P(in. Hg)</u>	<u>Γ(°F)</u> ο	f Op.
W-653	. 0	0.0	0	0	0
W-2011	0	0.0	0	0	0
W-2101	0	0.0	0	0	0
W-2102	0	0.0	0	0	0
Total:	<u>0</u>	0.0			

4. Comments:

System did not operate during this period.

5. I certify that the information in this repor	, to the best of my knowledge, is true and correct.
No.	

Operator Signature: Date: 04-30-2012

Self-Monitoring Report LLNL Vapor Extraction System 13 (VES13) AREA VTFD-HS

1. Reporting Period: Business Month <u>May</u> Year <u>2012</u>

2. Dates (in bold and underline) treatment facility operated

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

Source	Monthly In: Volume(cu. ft)	stantaneous ow Rate(scfm)	<u>P(in. Hg)</u>		lours f Op.	
W-653	0	0.0	0	0	0	
W-2011	0	0.0	0	0	0	
W-2101	0	0.0	0	0	0	
W-2102	0	0.0	0	0	0	
Total:	<u>o</u>	0.0				

4. Comments:

System did not operate during this period.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 05-31-2012

Self-Monitoring Report LLNL Vapor Extraction System 13 (VES13) AREA VTFD-HS

1. Reporting Period: Business Month June Year 2012

2. Dates (in bold and underline) treatment facility operated

June 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

Source	Monthly Installed Volume(cu. ft)	stantaneous ow Rate(scfm)	P(in. Hg)		lours f Op.	
W-653	0	0.0	0	0	0	
W-2011	0	0.0	Ŏ	Ŏ	Ŏ	
W-2101	0	0.0	0	0	Õ	
W-2102	0	0.0	0	0	0	
Total:	<u></u>	0.0			·	_

4. Comments:

System did not operate during this period.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 06-29-2012

Self-Monitoring Report LLNL Portable Treatment Unit 3 (PTU3) AREA TFE-E

1. Reporting Period: Business Month April Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): __750

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): $\begin{array}{c} \textbf{04-03-2012} \\ \textbf{Influent pH:} & \textbf{7.0} \\ \textbf{Effluent pH:} & \textbf{7.0} \\ \textbf{Effluent Temperature (°C):} & \textbf{19.5} \\ \end{array}$

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-566	381,177	8.6
W-1109	60,201	1.5
W-1903	38,819	1.0
W-1909	0	0.0
W-2305	0	0.0
Total:	480,197	11.1

5. Discharge Information:

_Arroyo Las Positas	TFC-R003	480,197
Discharge Location	Receiving Water Station	Volume

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-01-2012

Self-Monitoring Report LLNL Portable Treatment Unit 3 (PTU3) AREA TFE-E

1. Reporting Period: Business Month May Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 </u>

Total monthly time facility operated (hours): <u>758</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-01-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	7.0
Effluent Temperature (°C):	20.1

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-566	382,447	8.5
W-1109	56,350	1.2
W-1903	33,312	0.7
W-1909	0	0.0
W-2305	0	0.0
Total:	472,109	10.5

5. Discharge Information:

Arroyo Las Positas	TFC-R003	472,109
Discharge Location	Receiving <u>Water Station</u>	Volume

6. Comments:

7. I certify that the information in this report, to the best of my	knowledge, is true and correct
	5 ,
Operator Signature: Ann Shomes	Date: 06-04-2012

Self-Monitoring Report LLNL Portable Treatment Unit 3 (PTU3) AREA TFE-E

1. Reporting Period: Business Month <u>June</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

June 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): _680

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-04-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>20.9</u>

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-566	341,736	8.5
W-1109	50,015	1.2
W-1903	26,074	0.6
W-1909	0	0.0
W-2305	109	0.0
Total:	417,934	10.4

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume
Arroyo Las Positas	TFC-R003	417.934

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: <u>07-05-2012</u>

Self-Monitoring Report LLNL GAC Treatment Unit 07 (GTU07) AREA TFE-HS

1. R	eporting Per	riod: I	Busir	ness l	Mon	th	Ar	<u>oril</u>	Yea	ır <u>20</u>	<u>12</u>								
2. D	ates (in bol	d and	unc	derlin	<u>ne</u>)	treat	ted g	roun	d wa	ater v	vas d	isch	arg	ed					
	March April	31 01 16	<u>02</u> <u>17</u>	03 18	04 19	05 20	<u>06</u> <u>21</u>	<u>07</u> <u>22</u>	<u>08</u> <u>23</u>	<u>09</u> <u>24</u>	10 25	<u>11</u> <u>26</u>	12 27	<u>2</u> <u>:</u>	13 28	14 29	1 3	50	
	Total month	ıly tin	ne fa	cility	ope	rate	d (ho	ours)	: _	<u>700</u>									
3. N	Ionthly Com	plian	ce D	ata:															
	Date compli Influent pH: Effluent pH Effluent Ter	: :	•		•	orm	ed (1	m/d/	y):	<u>04</u>	- <u>05-</u> 2	2012 7.0 7.0 14.3	<u> </u>						
4. W	ellfield Dat	a:																	
	Source		Mont <u>/olur</u>	hly me(ga	<u>al)</u>		tanta												
	W-2105			35	51			2.7	7										
	Total:	•		<u>35</u>	<u>51</u>			2.7	7										
5. D	ischarge Inf	ormat	ion:																
	Discharge	Loca	tion								eivii ter S	_	<u>n</u>		V	'olu	ıme	2	
	Arroyo	Las F	Posit	<u>as</u>			**			_ <u>T</u>	FC-	<u>R00:</u>	<u>3</u>				35 1	<u>l</u>	
6. Comments: W-2105 secured 4/3/12 to allow well levels to recover in preparation for monthly/quarterly sample collection. W-2105 utilizes vacuum-enhanced groundwater extraction combined with cyclic pump operation. Therefore constant flow rate and hours of operation may not correspond.																			
	7. I certify that the information in this report, to the best of my knowledge, is true and correct. Operator Signature: Date: 05-03-2012																		
~ ~ ~				_	_					~			· · · ·	·~-			_		

Self-Monitoring Report LLNL GAC Treatment Unit 07 (GTU07) AREA TFE-HS

1. Reporting P	eriod: Business	Month May	Year 2012
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2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 </u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-02-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>24.1</u>

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-2105	179	0.5
Total:	<u>179</u>	0.5

5. Discharge Information:

Arroyo Las Positas	TFC-R003	179
Discharge Location	Water Station	Volume

6. Comments:

W-2105 utilizes vacuum-enhanced groundwater extraction combined with cyclic pump operation. Therefore constant flow rate and hours of operation may not correspond. The decline in monthly volume for the reporting month can be partially attributed to the shutdown of VES 12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-15-2012

Self-Monitoring Report LLNL GAC Treatment Unit 07 (GTU07) AREA TFE-HS

1. Reporting Perio	od: Business Mon	th <u>June</u>	Year <u>201</u>	<u>2</u>				
2. Dates (in bold and <u>underline</u>) treated ground water was discharged								
June <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15</u> <u>16 17 18 19 20 21 22 23 24 25 26 27 28</u>								
Total monthly time facility operated (hours): 648								
3. Monthly Comp	liance Data:							
Date compliance sampling performed (m/d/y): Influent pH: Effluent pH: Effluent Temperature (°C): 06-06-2012 7.0 20								
4. Wellfield Data:	:							
Source	Monthly Volume(gal)	Instantaneo Flow Rate(w	
W-2105	106	1.	5					
Total:	<u>106</u>	1.	<u>5</u>					
5. Discharge Info	rmation:							
Discharge I	_ocation			eiving ter Statio	<u>n</u>	Volume		
Arroyo L	as Positas		<u>_T</u>	FC-R003	3	<u>106</u>		
6. Comments: W-2105 utilizes vacuum-enhanced groundwater extraction combined with cyclic pump operation. Therefore constant flow rate and hours of operation may not correspond. The decline in monthly volume for the reporting month can be partially attributed to the shutdown of VES 12.								
7. I certify that the		his report, to					correct.	
Operator Signatur	a Kan	VIII.	ma	Data	- 07 .05	-2012		

Self-Monitoring Report LLNL Portable Treatment Unit 9 (PTU9) AREA TFE-NW

1. Reporting Per	iod: Business Mon	th <u>April</u> Year	r <u>2012</u>					
2. Dates (in bold and <u>underline</u>) treated ground water was discharged								
March April $\frac{31}{01}$ $\frac{02}{16}$ $\frac{03}{17}$ $\frac{04}{18}$ $\frac{05}{19}$ $\frac{06}{20}$ $\frac{07}{21}$ $\frac{08}{22}$ $\frac{09}{23}$ $\frac{10}{24}$ $\frac{11}{25}$ $\frac{12}{26}$ $\frac{13}{27}$ $\frac{14}{28}$ $\frac{15}{29}$ $\frac{10}{30}$								
Total month	ly time facility ope	erated (hours):	<u>759</u>					
3. Monthly Com	pliance Data:							
Date compliance sampling performed (m/d/y): Influent pH: Effluent pH: T.0 Effluent Temperature (°C):								
4. Wellfield Data	a :							
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)						
W-1211 W-1409	285,910 104,249	6.3 2.3						
Total:	390,159	8.7						
5. Discharge Information: Receiving Discharge Location Water Station Volume								
<u>Arroyo</u>	Arroyo Las Positas TFC-R003 390,159							
6. Comments:								
7. I certify that the information in this report, to the best of my knowledge, is true and correct.								
Operator Signatu	Operator Signature: Date: 05-01-2012							

Self-Monitoring Report LLNL Portable Treatment Unit 9 (PTU9) AREA TFE-NW

1. Reporting Period: Business Month May Year 2012

2. Dates (in bold and <u>underline</u>) treated ground water was discharged														
May	<u>01</u> <u>02</u> <u>17</u>	03 04 18 19	<u>05</u> <u>20</u>	<u>06</u> <u>21</u>	<u>07</u> <u>22</u>	<u>08</u> <u>23</u>	<u>09</u> <u>24</u>	10 25	<u>11</u> <u>26</u>	<u>12</u> <u>27</u>	13 28	<u>14</u> <u>29</u>	15 30	<u>31</u>
Total monthly time facility operated (hours):														
3. Monthly Com	pliance I	Data:												
Date compliance sampling performed (m/d/y): Influent pH: Effluent pH: Effluent Temperature (°C): 05-07-2012 7.0 22.2														
4. Wellfield Data	a:													
Source	Mon <u>Volu</u>	thly ıme(gal)		stanta										
W-1211 W-1409		277,354 101,788			6.2 2.2									
Total:		379,142			8.4	<u> </u>								
5. Discharge Info	ormation	:					_							
Discharge Location							eivii ter S	_	<u>n</u>	Z	olur/	<u>ne</u>		
Arroyo Las Positas					_T	FC-	R003	<u>3</u>	_3	79,1	<u>42</u>			
6. Comments:														
7. I certify that th		affon in	this r	eport	, to t	he b	est of	f my	kno	wled	ge, is	s true	and	correct
Operator Signatu	ire: //	all	11	" le			_		Date	e: 06	-06-	2012		

Self-Monitoring Report LLNL Portable Treatment Unit 9 (PTU9) AREA TFE-NW

<u>01</u> <u>02</u> <u>03</u> <u>04</u> <u>05</u> <u>06</u> <u>07</u> <u>08</u> <u>09</u> <u>10</u> <u>11</u> <u>12</u> <u>13</u> <u>14</u> <u>15</u>

1. Reporting Period: Business Month <u>June</u> Year <u>2012</u>

June

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

<u>16</u>	<u>17</u> <u>18</u> <u>19</u>	<u>20</u> <u>21</u> <u>22</u> <u>23</u>	<u>24</u> <u>25</u> <u>26</u> <u>27</u>	<u>28</u> <u>29</u>
Total monthly ti	me facility ope	erated (hours):	<u>704</u>	
3. Monthly Complia	nce Data:			
Date compliance Influent pH: Effluent pH: Effluent Temper		formed (m/d/y):	06-08-2012 7.0 7.0 22.2	
4. Wellfield Data:				
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)		
W-1211 W-1409	256,722 93,528	6.1 2.2		
Total:	350,250	8.3	<u>(m)</u>	
5. Discharge Informa	ation:			
Discharge Loc	cation		Receiving Water Station	Volume
Arroyo Las	Positas		TFC-R003	350,250
6. Comments:				
7. I certify that the ir	nformation in the	his report, to the bo		ge, is true and correct.
/				

Self-Monitoring Report LLNL Mini Treatment Unit 04 (MTU04) AREA TFE-SE

1. Reporting Period: Business Month April Year 2012						
2. Dates (in bold and <u>underline</u>) treated ground water was discharged						
March April $\begin{array}{c ccccccccccccccccccccccccccccccccccc$						
Total monthly time facility operated (hours):						
3. Monthly Compliance Data:						
Date compliance sampling performed (m/d/y): Influent pH: Effluent pH: Effluent Temperature (°C): 04-03-2012 7.0 7.0 20.9						
4. Wellfield Data:						
Monthly Instantaneous Source Volume(gal) Flow Rate(gpm)						
W-359 375,101 8.4						
Total: <u>375,101</u> <u>8.4</u>						
5. Discharge Information:						
<u>Discharge Location</u> Receiving <u>Water Station</u> <u>Volume</u>						
Arroyo Las Positas TFC-R003 375,101						
6. Comments:						
7. I certify that the information in this report, to the best of my knowledge, is true and correct. Operator Signature. Date: 05-01-2012						

Self-Monitoring Report LLNL Mini Treatment Unit 04 (MTU04) AREA TFE-SE

1. Reporting Period: Business Month May Year 2012 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged May <u>01</u> <u>02</u> <u>03</u> <u>04</u> <u>05</u> <u>06</u> <u>07</u> <u>08</u> <u>09</u> <u>10</u> <u>11</u> <u>12</u> <u>13</u> <u>14</u> <u>15</u> <u>16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31</u> Total monthly time facility operated (hours): 740 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 05-01-2012 Influent pH: 7.0 Effluent pH: **7.0** Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Volume(gal) Source Flow Rate(gpm) W-359 373,044 8.4 Total: 373,044 <u>8.4</u> 5. Discharge Information: Receiving Discharge Location Water Station Volume Arroyo Las Positas TFC-R003 373,044 6. Comments: Facility secured 5/7/12 at 14:15 hrs to perform system interlock checks. Facility was restarted 5/7 at 14:45 hrs. 7. I certify that the information in this report, to the best of my knowledge, is true and correct. Operator Signature: __ Date: 06-04-2012

Self-Monitoring Report LLNL Mini Treatment Unit 04 (MTU04) AREA TFE-SE

1. Reporting Period	1. Reporting Period: Business Month <u>June</u> Year <u>2012</u>							
2. Dates (in bold and <u>underline</u>) treated ground water was discharged								
June $\frac{01}{16} \frac{02}{17} \frac{03}{18} \frac{04}{19} \frac{05}{20} \frac{06}{21} \frac{07}{22} \frac{08}{23} \frac{09}{24} \frac{10}{25} \frac{11}{26} \frac{12}{27} \frac{13}{28} \frac{14}{25} \frac{15}{26}$								
Total monthly time facility operated (hours): _651								
3. Monthly Compli	ance Data:							
Date compliance sampling performed (m/d/y): Influent pH: Effluent pH: Effluent Temperature (°C): 06-04-2012 7.0 7.0 20.5								
4. Wellfield Data:								
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpr	<u>n)</u>					
W-359	337,065	8.3						
Total:	337,065	8.3						
5. Discharge Inform	nation:							
Discharge Lo	cation		Receiving Water Station	Volume				
Arroyo La	Arroyo Las Positas TFC-R003 337,065							
6. Comments:								
7. I certify that the information in this report, to the best of my knowledge, is true and correct. Operator Signature: Date: 07-05-2012								

Self-Monitoring Report LLNL Mini Treatment Unit 03 (MTU03) AREA TFE-SW

1. Reporting Period: Business Month April Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 741

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>04-04-2012</u>
Influent pH:	7.3
Effluent pH:	7.5
Effluent Temperature (°C):	13.2

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-1518	41,403	0.9
W-1520	26	1.2
W-1522	40	1.7
Total:	41,469	3.8

5. Discharge Information:

_Arroyo Las Positas	TFC-R003	41,469
Discharge Location	Receiving Water Station	Volume

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-09-2012

Self-Monitoring Report LLNL Mini Treatment Unit 03 (MTU03) AREA TFE-SW

1. Reporting Period: Business Month May Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 694

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-02-2012</u>
Influent pH:	<u>7.3</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>15.5</u>

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1518	38,833	0.7
W-1520	0	0.0
W-1522	0	0.0
Total:	38,833	0.7

5. Discharge Information:

	Receiving		
Discharge Location	Water Station	<u>Volume</u>	
Arroyo Las Positas	TFC-R003	38.833	

6. Comments:

The facility was down for approximately 36 hrs. for annual interlock check and equipment repair.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature Date: 06-13-2012

Self-Monitoring Report LLNL Mini Treatment Unit 03 (MTU03) AREA TFE-SW

1. Reporting Period: Business Month <u>June</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

June 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 628

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-14-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>16.1</u>

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)		
W-1518	28,894	0.7		
W-1520	0	0.0		
W-1522	0	0.0		
Total:	28,894	0.7		

5. Discharge Information:

	Receiving		
Discharge Location	Water Station	Volume	
Arroyo Las Positas	TFC-R003	28.894	

6. Comments:

The facility was shutdown at 1102 on 6-1-12 to perform SOP3.2 and download software. The facility was restarted at 1416. The facility shut down at 1951 on 6-1-12(Friday) and was restarted at 707 on 6-4-12(Monday).

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-17-2012

Self-Monitoring Report LLNL Mini Treatment Unit 05 (MTU05) AREA TFE-W

1. Reporting Period: Business Month April Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged March <u>01</u> <u>02</u> <u>03</u> <u>04</u> <u>05</u> <u>06</u> <u>07</u> <u>08</u> <u>09</u> <u>10</u> <u>11</u> <u>12</u> <u>13</u> <u>14</u> <u>15</u> April <u>16</u> <u>17</u> <u>18</u> <u>19</u> <u>20</u> <u>21</u> <u>22</u> <u>23</u> <u>24</u> <u>25</u> <u>26</u> <u>27</u> <u>28</u> <u>29</u> <u>30</u> Total monthly time facility operated (hours): 740 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 04-04-2012 Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm) W-292 267,635 6.0 W-305 576,096 12.0 Total: 843,731 <u>18.0</u> 5. Discharge Information: Receiving Discharge Location Water Station Volume Arroyo Las Positas **TFC-R003** 843,731 6. Comments: NA 7. I certify that the information in this report, to the best of my knowledge, is true and correct. Operator Signature: Date: 05-09-2012

Self-Monitoring Report LLNL Mini Treatment Unit 05 (MTU05) AREA TFE-W

1. Reporting Period: Business Month May Year 2012 2. Dates (in **bold** and underline) treated ground water was discharged May <u>01</u> <u>02</u> <u>03</u> <u>04</u> <u>05</u> <u>06</u> <u>07</u> <u>08</u> <u>09</u> <u>10</u> <u>11</u> <u>12</u> <u>13</u> <u>14</u> <u>15</u> $\overline{16}$ $\overline{17}$ $\overline{18}$ $\overline{19}$ $\overline{20}$ $\overline{21}$ $\overline{22}$ $\overline{23}$ $\overline{24}$ $\overline{25}$ $\overline{26}$ $\overline{27}$ $\overline{28}$ $\overline{29}$ $\overline{30}$ $\overline{31}$ Total monthly time facility operated (hours): 741 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 05-02-2012 Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm) W-292 267,300 6.0 W-305 623,062 14.0 Total: 890,362 20.0 5. Discharge Information: Receiving Discharge Location Water Station Volume Arroyo Las Positas **TFC-R003** 890,362 6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

NA

ROD DALLI

Operator Signature: Date: 06-13-201

Self-Monitoring Report LLNL Mini Treatment Unit 05 (MTU05) **AREA TFE-W**

1. Reporting Period: Business Month June Year 2012

June

2. Dates (in **bold** and underline) treated ground water was discharged

Total monthly time facility operated (hours): 690 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 06-14-2012 Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Volume(gal) Flow Rate(gpm) Source W-292 245,822 6.0 W-305 580,193 13.9 Total: 826,015 19.9 5. Discharge Information: Receiving Discharge Location Water Station Volume Arroyo Las Positas TFC-R003 826,015 6. Comments: NA 7. I certify that the information in this report, to the best of my knowledge, is true and correct. Operator Signature: _ Date: <u>07-17-2012</u>

Self-Monitoring Report LLNL Vapor Extraction System 16 (VES16) AREA VTFE-ELM

1. Reporting Period: Business Month April Year 2012

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

3. Wellfield Data:

Source	Monthly Volume(cu. ft	Instantaneous Flow Rate(scfm)	P(in. Hg)		Hours of Op.
W-1903	75,199	1.8	-18.77	69	743
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-001	225	0.0	0	0	0
W-543-003	980,876	21.0	-1	69	743
W-543-1908	348	0.0	0	0	0
Total:	1,056,648	22.8			

4. Comments:

5.	I certify that the info	ormation in thi	is report, to the	best of my kno	owledge, is tru	e and correct.
٠.	I colding that the min	ormación m un	is report, sp the	dest of my kin	ownedge, is tid	o and correct.

Operator Signature: Date: 05-01-2012

Self-Monitoring Report LLNL Vapor Extraction System 16 (VES16) AREA VTFE-ELM

1. Reporting Period: Business Month <u>May</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 </u>

3. Wellfield Data:

Source	Monthly Volume(cu. ft	Instantaneous Flow Rate(scfm)	P(in. Hg)		Hours of Op.
W-1903	63,739	1.5	-18.3	54	740
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-003	1,025,548	22.9	-1.2	54	740
W-543-1908	0	0.0	0	0	0
Total:	1,089,287	24.4	•		

4. Comments:

5. I certify that the information in this report, to the best of my	knowledge, is true and correct.
	8 ,
Operator Signature: am Momo	D 06040040
Operator Signature:	Date: 06-04-2012

Self-Monitoring Report LLNL Vapor Extraction System 16 (VES16) AREA VTFE-ELM

- 1. Reporting Period: Business Month <u>June</u> Year <u>2012</u>
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

June <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15</u> <u>16 17 18 19 20 21 22 23 24 25 26 27 28</u>

3. Wellfield Data:

	Monthly	Instantaneous			Hours
Source	Volume(cu. ft	Flow Rate(scfm)	P(in. Hg)	T(°F)	of Op.
W-1903	52,450	1.4	-1	82	622
W-1909	0	0.0	0	0	0.
W-2305	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-1908	0	0.0	0	0	0
W-543-003	820,725	20.4	-17	82	622
Total:	873,175	21.8	****		

4. Comments:

Facility was discovered shutdown 6/5/12 due to W-1903 air coil temperature alarm. Interlock was disabled and facility was restarted 6/6/12 at 08:40 hrs. Facility was secured 6/21/12 at 07:30 to repair water leak on blower. Facility was restarted at 13:55. Facility was discovered shutdown 6/26/12, caused by High separator level interlock. Excess operating liquid was drained from blower reservoir and mechanical outlet regulator removed from unit and replaced. Facility was restarted 6/27/12 at 08:38 hrs.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-10-2012

Self-Monitoring Report LLNL Vapor Extraction System 12 (VES12) AREA VTFE-HS

1. Reporting Period: Business Month April Year 2012

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

3. Wellfield Data:

Source	Monthly Volume(cu. ft)	Instantaneous Flow Rate(scfm)	P(in. Hg)		Hours of Op.
W-2105	54,529	1.3	-8.31	68	739
W-ETS-2008	A 86	0.0	0	0	0
W-ETS-2008	B 649,152	13.7	-7.92	68	739
W-ETS-2009	104	0.0	0	0	0
W-ETS-2010	A 146	0.0	0	0	0
W-ETS-2010	B 140	0.0	0	0	0
Total:	704,157	15.0			

4. Comments:

Quarterly vapor samples collected 4/12/12. Found facility shutdown 4/16 @ 14:00 hrs. due to low discharge separator level. Added 10 gallons of operating liquid to separator, and facility was restarted 4/16 @ 14:35 hrs.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: homos Date: 05-01-2012

Self-Monitoring Report LLNL Vapor Extraction System 12 (VES12) AREA VTFE-HS

- 1. Reporting Period: Business Month May Year 2012
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May <u>01 02 03 04 05 06 07 08 09</u> 10 11 12 13 14 15 16 17 18 19 20 <u>21 22 23 24 25 26 27 28 29 30 31</u>

3. Wellfield Data:

	Monthly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	<u>P(in. Hg)</u>	T(°F)	of Op.
W-2105	27,283	1.3	-8.16	70	360
W-ETS-2008	A 0	0.0	0	0	0
W-ETS-2008	B 312,278	14.6	-7.94	70	360
W-ETS-2009	0	0.0	0	0	0
W-ETS-2010	A 0	0.0	0	0	0
W-ETS-2010	B 0	0.0	0	0	0
Total:	339,561	15.9	ij.		

4. Comments:

Facility shutdown 5/9/12 and was offline several days during reporting month to evaluate system electronics. Month end volumes for W-ETS-2008B were calculated from the individual flow measurements, and not derived from the totalizer values.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-05-2012

Self-Monitoring Report LLNL Vapor Extraction System 12 (VES12) AREA VTFE-HS

- 1. Reporting Period: Business Month <u>June</u> Year <u>2012</u>
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

June <u>01 02 03 04 05 06 07 08 09 10 11</u> 12 13 14 15

3. Wellfield Data:

Source	Monthly Volume(cu. ft)	Instantaneous Flow Rate(scfm)	<u>P(in. Hg)</u> 7		Hours
<u>504.00</u>	v oranie (ca. 1t)	110W Rate(Seilli)	<u>1 (III. 11g)</u>	1 1	<u>ог Ор.</u>
W-2105	21,552	0.0	0	0	270
W-ETS-2008	A 0	0.0	0	0	0
W-ETS-2008	B 235,329	0.0	0	0	270
W-ETS-2009	0	0.0	0	0	0
W-ETS-2010	A 0	0.0	0	0	0
W-ETS-2010	B 0	0.0	0	0	0
Total:	256,881	0.0	·		

4. Comments:

Facility was discovered shutdown 6/11/12 due to catastrophic failure of vacuum unit, and was inoperable when month end readings were recorded.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-05-2012

Self-Monitoring Report LLNL GAC Treatment Unit 01 (GTU01) AREA TFG-1

1. Reporting Period	l: Business Mor	nth <u>April</u>	'ear <u>2012</u>	
2. Dates (in bold a	and <u>underline</u>)	treated ground	water was discharg	ed
March 31 01 01 10	<u>1 02 03 04</u>	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{08}{23} \frac{09}{24} \frac{10}{25} \frac{11}{26} \frac{1}{2}$	$\frac{2}{7} \frac{13}{28} \frac{14}{29} \frac{15}{30}$
Total monthly	time facility ope	erated (hours):	<u>745</u>	
3. Monthly Compli	ance Data:			
Date compliand Influent pH: Effluent pH: Effluent Tempe		formed (m/d/y):	04-11-2012	
4. Wellfield Data:				
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpr	<u>n)</u>	
W-1111	399,551	8.9		
Total:	399,551	8.9		
5. Discharge Inform	nation:			
Discharge Lo	cation		Receiving Water Station	Volume
Arroyo Sec	<u>:o</u>		TFG-ASW	399,551
6. Comments:				
	Val /	nie report, to the		dge, is true and correct
Operator Signature:	face to		Date: 0	5-01-2012

Land Observation Report date: TFG-ASW - Arroyo Seco

Ι.	Reporting Period: Business Month April Year 201	<u>.2</u>	
2.	Date compliance sampling performed <u>04-11-2012</u>		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	10.7 0.45 4/S	
4.	Receiving Data:		
	Sample Location pH Temperature (C) Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting i	month:	
	Visual Observations	Effluent	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No No Not Required Not Required	<u>No</u> <u>No</u> <u>No</u> <u>N/A</u>
6.	Comments:		
7.	I certify that the information in this report, to the bes	t of my knowledge, i	s true and correct.
	Operator Signature:	Date: <u>05-1</u> ′	7-2012

Self-Monitoring Report LLNL GAC Treatment Unit 01 (GTU01) AREA TFG-1

1. Reporting Perio	od: Business Moi	nth <u>May</u> Yea	ar <u>2012</u>		
2. Dates (in bold and <u>underline</u>) treated ground water was discharged					
May <u>0</u> <u>1</u>	01 02 03 04 6 17 18 19	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	13 14 15 28 29 30 31	
Total monthly	time facility ope	erated (hours):	718		
3. Monthly Compl	iance Data:				
Date compliance sampling performed (m/d/y): Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data:					
4. Weilfield Data.					
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)	9	
W-1111	381,528	8.8			
Total:	381,528	8.8			
5. Discharge Inform	mation:				
Discharge L	ocation		Receiving Water Station	<u>Volume</u>	
Arroyo Se	eco		TFG-ASW	381,528	
6. Comments: System secured from 5/30/12 to 6/1/12 for carbon change.					
7. I certify that the information in this report, to the best of my knowledge, is true and correct.					
Operator Signature	: fade	len	Date: <u>0</u>	<u>5-06-2012</u>	

Land Observation Report date: TFG-ASW - Arroyo Seco

_					
1.	Reporting Period: Business Month May Year 2012				
2.	Date compliance sampling performed <u>05-08-2012</u>				
3.	Weather Conditions:				
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	16.2 0.00 6/SSW			
4.	Receiving Data:				
	Sample Location pH Temperature (C) Pecciving Water N/M N/M				
-	Receiving Water N/M N/M				
5.	Land Observations, as "Yes" or "No", for reporting r	nonth:			
	Visual Observations	Effluent	Receiving Water		
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No No Not Required Not Required	<u>No</u> <u>No</u> <u>No</u> <u>N/A</u>		
6.	Comments:				
7.	I certify that the information in this report, to the bes	t of my knowledge, i	s true and correct.		
	Operator Signature: / Well Clean	Date: 08-0	7-2012		
	•				

Self-Monitoring Report LLNL GAC Treatment Unit 01 (GTU01) AREA TFG-1

1. Reporting Per	iod: Business Mont	h <u>June</u> Year	r <u>2012</u>			
2. Dates (in bol	2. Dates (in bold and <u>underline</u>) treated ground water was discharged					
June	01 02 03 04 0 16 17 18 19 2	05 06 07 08 20 21 22 23	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{13}{28} \frac{14}{29} \frac{15}{29}$		
Total month	ly time facility oper	ated (hours):	672			
3. Monthly Com	pliance Data:					
Date compliance sampling performed (m/d/y): Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data:						
	34	_				
Source	•	Instantaneous Flow Rate(gpm)		BY		
W-1111	354,699	8.8				
Total:	354,699	8.8				
5. Discharge Info	ormation:					
D' I	*		Receiving			
<u>Discharge</u>	Location		Water Station	Volume		
<u>Arroyo S</u>	<u>Seco</u>		TFG-ASW	_354,699		
6. Comments:						
7. I certify that the information in this report, to the best of my knowledge, is true and correct. Operator Signature: Date: 07-02-2012						

Land Observation Report date: TFG-ASW - Arroyo Seco

1.	Reporting Period: Business Month <u>June</u> Year <u>2012</u>	<u>.</u>	
2.	Date compliance sampling performed <u>06-06-2012</u>		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	17 0.13 6/ SW	
4.	Receiving Data:		
	Sample Location pH Temperature (C) Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting n	nonth:	
	Visual Observations	<u>Effluent</u>	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No No Not Required Not Required	<u>No</u> <u>No</u> <u>No</u> <u>N/A</u>
6.	Comments:		
7.	I certify that the information in this report, to the bes Operator Signature:	t of my knowledge, i	

Self-Monitoring Report LLNL Mini Treatment Unit 02 (MTU02) AREA TFG-N

1. Reporting Period: Business Month April Year 2012 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged March April <u>04</u> <u>05</u> <u>06</u> <u>07</u> <u>08</u> <u>09</u> <u>10</u> <u>11</u> <u>12</u> <u>13</u> <u>14</u> 15 $\overline{16}$ $\overline{17}$ $\overline{18}$ $\overline{19}$ $\overline{20}$ $\overline{21}$ $\overline{22}$ $\overline{23}$ $\overline{24}$ $\overline{25}$ $\overline{26}$ $\overline{27}$ $\overline{28}$ $\overline{29}$ $\overline{30}$ Total monthly time facility operated (hours): 708 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 04-11-2012 Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm) W-1806 123,031 2.9 W-1807 138,060 4.2 Total: <u>261,091</u> **7.1** 5. Discharge Information: Receiving Discharge Location Water Station Volume 1 Arroyo Las Positas **TFC-R003** 261,091 6. Comments: System secure from 4/14/12 to 4/16/12 due to high sump alarm. 7. I certify that the information in this report, to the best of my knowledge, is true and correct. Operator Signature: _ Date: 05-01-2012

Self-Monitoring Report LLNL Mini Treatment Unit 02 (MTU02) AREA TFG-N

1. Reporting Period: Business Month May Year 2012 2. Dates (in **bold** and underline) treated ground water was discharged May <u>01</u> <u>02</u> <u>03</u> <u>04</u> <u>05</u> <u>06</u> <u>07</u> <u>08</u> <u>09</u> <u>10</u> <u>11</u> <u>12</u> <u>13</u> <u>14</u> <u>15</u> <u>16</u> <u>17</u> <u>18</u> <u>19</u> <u>20</u> <u>21</u> <u>22</u> <u>23</u> <u>24</u> <u>25</u> <u>26</u> <u>27</u> <u>28</u> <u>29</u> <u>30</u> <u>31</u> Total monthly time facility operated (hours): 748 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 05-08-2012 Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm) 122,822 2.9 W-1806 W-1807 142,842 4.1 Total: 265,664 <u>7.0</u> 5. Discharge Information: Receiving Discharge Location Water Station Volume Arroyo Las Positas **TFC-R003** <u>265,664</u> 6. Comments: 7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Date: 06-06-2012

Self-Monitoring Report LLNL Mini Treatment Unit 02 (MTU02) AREA TFG-N

1. Reporting Per	iod: Business Mon	nth <u>June</u> Yo	ear <u>2012</u>										
2. Dates (in bold and <u>underline</u>) treated ground water was discharged													
June	01 02 03 04 16 17 18 19	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{8}{3} \frac{09}{24} \frac{10}{25} \frac{11}{26} \frac{12}{25}$	$\frac{2}{7} \frac{13}{28} \frac{14}{29} \frac{15}{29}$									
Total monthly time facility operated (hours):													
3. Monthly Compliance Data:													
Influent pH: Effluent pH:	nperature (°C):	formed (m/d/y):	06-06-2012 7.0 7.0 21.2										
+. Weillield Date		_											
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpn	<u>n)</u>										
W-1806 W-1807	89,585 165,687	2.1 4.0											
Total:	255,272	<u>6.1</u>											
5. Discharge Info	ormation:												
Discharge	Location		Receiving Water Station	Volume									
_Arroyo]	Las Positas		_TFC-R003	255,272									
6. Comments:													
7. I certify that th	e information in the	is report, to the	best of my knowle	dge, is true and cor	rect.								
Operator Signatu	1/md/	fer		7-02-2012									

Self-Monitoring Report LLNL Portable Treatment Unit 5 (PTU5) AREA TF406

1. Reporting Period: Business Month <u>April</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 751

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):

Influent pH:

Effluent pH:

Effluent Temperature (°C):

04-04-2012

7.5

7.5

21.5

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-1309 W-1310	195,983 442,249	4.4 10.0
Total:	638,232	14.4

5. Discharge Information:

<u>Discharge Location</u>

<u>Nature Station</u>

Receiving

<u>Water Station</u>

Volume

Arroyo Las Positas

TFC-R003

638,232

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-09-2012

Self-Monitoring Report LLNL Portable Treatment Unit 5 (PTU5) AREA TF406

1. Reporting Period: Business Month <u>May</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 754

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-02-2012</u>
Influent pH:	<u>7.4</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>22.2</u>

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-1309	195,468	4.4
W-1310	446,176	10.0
Total:	641,644	14.4

5. Discharge Information:

Discharge Location	Water Station	Volume
Arrovo Las Positas	TFC-R003	641.644

Receiving

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-13-2012

Self-Monitoring Report LLNL Portable Treatment Unit 5 (PTU5) AREA TF406

1. Reporting Per	iod: Business Mor	nth <u>June</u> Yea	r <u>2012</u>											
2. Dates (in bold	and <u>underline</u>)	treated ground wa	ater was discharg	ged										
June	01 02 03 04 16 17 18 19	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 <u>13</u> <u>14</u> <u>15</u> <u>7 28</u> <u>29</u>										
Total monthly time facility operated (hours):														
3. Monthly Compliance Data:														
Date compliance sampling performed (m/d/y): Influent pH: Effluent pH: T.5 Effluent Temperature (°C):														
4. Wellfield Data	:													
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)												
W-1309 W-1310	71,671 413,995	4.2 10.1												
Total:	485,666	14.3												
5. Discharge Info	rmation:													
Discharge 1	<u>Location</u>		Receiving Water Station	Volume										
<u>Arroyo I</u>	as Positas		TFC-R003	485,666										
6. Comments: W-1309 wa	as secured on 6-12	-12 at 650.												

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

____ Date: <u>07-18-2012</u>

Self-Monitoring Report LLNL GAC Treatment Unit 03 (GTU03) AREA TF406-NW

1. Reporting Per	riod: Business Mon	th <u>April</u> Y	ear <u>2012</u>	
2. Dates (in bol	d and <u>underline</u>)	treated ground	water was discharge	ed
March April	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{05}{20} \frac{06}{21} \frac{07}{22} \frac{0}{2}$	8 09 10 11 12 3 24 25 26 27	- 13 14 15 28 29 30
Total month	ly time facility ope	rated (hours):	572	
3. Monthly Com	pliance Data:			
Influent pH: Effluent pH:	nperature (°C):	ormed (m/d/y):	04-04-2012 7.0 7.0 21.3	
Wennerd Data				
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpn	<u>n)</u>	
W-1801	104,194	3.1		
Total:	104,194	3.1		
5. Discharge Info	ormation:	Æ		
Discharge	<u>Location</u>		Receiving Water Station	Volume
_Arroyo]	Las Positas		TFC-R003	104,194
6. Comments: System sec	cured on 4/23/12 to	remove pump f	from W-1801 and de	evelop well.
7. I certify that th	e information in th	is report, to the	best of my knowled	lge, is true and correct
Operator Signatu	1/ant 1	le		5-01-2012

Self-Monitoring Report LLNL GAC Treatment Unit 03 (GTU03) AREA TF406-NW

1. Reporting Per	iod:	Busi	ness	Mor	ıth	<u>M</u>	<u>ay</u>	Year	<u> 201</u>	<u>2</u>						
2. Dates (in bold	d and	d <u>un</u>	derli	<u>ne</u>)	trea	ted g	roun	ıd wa	ıter w	as d	isch	argeo	i			
May	01 16	02 17	03 18						09 24			12 27				<u>31</u>
Total monthly time facility operated (hours): 125																
3. Monthly Com	plian	се Г	Data:													
Date complia Influent pH: Effluent pH: Effluent Ten 4. Wellfield Data	npera			-	form	ied (i	m/d/ <u>y</u>	y):	<u>05</u> -	-30-2	2012 7.0 7.0 23.9					
Carre		Mon	•	1\			neoi									
Source		<u>volu</u>	me(g	<u>gal)</u>	Flo	<u>w</u> R	ate(g	<u>(pm)</u>								
W-1801			30,2	242			3.8	3								
Total:			30,2	242			3.8	1								
5. Discharge Info	rmat	tion:														
Discharge 1	Loca	<u>tion</u>								eivir er St	_	<u>n</u>	V	'olun	<u>ne</u>	
<u>Arroyo I</u>	Las I	Posit	as						_ <u>T</u>]	FC-I	<u>2003</u>	3	_	30,2	<u>42</u>	
5. Comments: System secure from 4/23/12 to 5/24/12 for W-1801 development and bio-fouling treatment. System secure from 5/27/12 to 5/29/12 due to low flow alarm.																
7. I certify that the information in this report, to the best of my knowledge, is true and correct.																
Operator Signature: Date: 06-06-2012																

Self-Monitoring Report LLNL GAC Treatment Unit 03 (GTU03) AREA TF406-NW

1. Reporting Period: Business Month June Year 2012

2. Dates (in bol	d and <u>underline</u>)	treated ground wa	ter was discharg	ged
June		$\begin{array}{c cccc} \underline{05} & \underline{06} & \underline{07} & \underline{08} \\ \underline{20} & \underline{21} & \underline{22} & \underline{23} \end{array}$		
Total month	ly time facility ope	erated (hours):	<u>675</u>	
3. Monthly Com	pliance Data:			
Influent pH: Effluent pH		formed (m/d/y):	$ \begin{array}{r} \underline{06-07-2012} \\ \underline{7.0} \\ \underline{7.0} \\ \underline{23.8} \end{array} $	
4. Wellfield Dat	a:			
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)		
W-1801	171,043	4.5		
Total:	171,043	4.5		
		4.5		
	ormation:	<u>4.5</u>	Receiving Water Station	<u>Volume</u>
5. Discharge Info	ormation:	<u>4.5</u>	_	<u>Volume</u>
5. Discharge Info	ormation: Location	<u>4.5</u>	Water Station	

Self-Monitoring Report LLNL Solar Treatment Unit 09 (STU09) AREA TF518-N

1. Reporting Period: Business Month April Year 2012

2. Dates (in bole	d an	d <u>un</u>	derli	i <u>ne</u>)	trea	ted g	groun	ıd wa	ater v	vas d	lisch	arge	d			
March April	30 01 16	31 02 17		04 19			07 22		09 24		11 26	12 27	13 28	14 29	15 30	
Total monthly time facility operated (hours): _0																
3. Monthly Compliance Data:																
Date compliant ph: Effluent ph: Effluent Ten					form	ied (i	m/d/ <u>y</u>	y): <u>N</u>	ot M	<u>Ieas</u>	ured	[
4. Wellfield Data	1 :															
Source		Mon <u>Volu</u>	•	gal)			aneou ate(g									
W-1410				0			0.0)								
Total:	•			<u>0</u>			0.0	2								
5. Discharge Info	rma	tion:														
Discharge	Loca	ation	,							eivir ter S	_	<u>n</u>	Ž	/olur	<u>ne</u>	
_Arroyo l	Las	Posit	tas						_ T	FC-J	<u>R003</u>	<u>3</u>		_	0	
6. Comments: This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.																
7. I certify that the		form	ati)on	in t		port	, to t	he be	est of					s true 2012	and (correct
							•									

Self-Monitoring Report LLNL Solar Treatment Unit 09 (STU09) AREA TF518-N

1. Reporting Period	d: Busin	ess Mor	nth	<u>M</u> :	<u>ay</u>	Year	<u>201</u>	<u>2</u>						
2. Dates (in bold and <u>underline</u>) treated ground water was discharged														
May 0		03 04 18 19		06 21			09 24	10 25	11 26	12 27	13 28		15 30	31
Total monthly time facility operated (hours): _0														
3. Monthly Compliance Data:														
Date complian Influent pH: Effluent pH: Effluent Temp 4. Wellfield Data:	•	•	form	ned (1	m/d/	y): <u>N</u>	lot M	<u>Ieas</u>	ured					
Source	Month <u>Volun</u>	ne(gal)				us gpm)								
W-1410		0			0.0	0								
Total:		0			0.0	<u>D</u>								
5. Discharge Inform	mation:						_							
Discharge L	ocation							eivii ter S	ng <u>tatio</u>	<u>n</u>	Ž	√olu:	<u>me</u>	
_Arroyo La	as Posita	as					_ <u>T</u>	FC-	R003	<u>3</u>			0	
6. Comments: This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.														
7. I certify that the information in this report to the best of my knowledge, is true and correct.														
Operator Signature: Date: 05-31-2012														

Self-Monitoring Report LLNL Solar Treatment Unit 09 (STU09) AREA TF518-N

1. Reporting Peri	iod:	Busi	ness	Moı	nth	<u>Ju</u>	<u>ne</u>	Year	r <u>201</u>	2						
2. Dates (in bold	d and	d <u>un</u>	derli	ine)	trea	ted g	rour	ıd wa	ıter v	vas d	isch	argeo	i			
June	01 16	02 17			05 20	06 21		08 23	09 24		1 I 26	12 27		14 29	15	
Total month	ly tiı	me fa	acilit	у ор	erate	d (h	ours)):	<u>0</u>							
3. Monthly Com	plia	nce I	Data:													
Date complication of the complication of the complete the	nper		•	•	form	ned (m/d/	y): <u>N</u>	lot M	<u>1eas</u>	ured					
4. Wellfield Data	a:															
Monthly Instantaneous Source Volume(gal) Flow Rate(gpm)																
W-1410				0			0.	0								
Total:				<u>0</u>			<u>0.</u>	0								
5. Discharge Info	orma	ation	•													
Discharge	Loc	ation	<u>1</u>							ceivi iter S	_	<u>n</u>	`	Volu	<u>me</u>	
Arroyo	Las	Posi	<u>itas</u>						<u>T</u>	FC-	R00	<u>3</u>			_0	
6. Comments: This treatment in the facility waste general	lity i	influ	ent.	The	facil	ity w										ies
7. I certify that th	he in	ıforn	atio	n in	this 1	por	t, to	the b	est c	of my	knc	wled	lge, i	is tru	e and	correct
Operator Signatu	ıre: .	į	20	su	_1	a	rag	su (<u></u>	, '	. Dat	te: <u>00</u>	<u>5-29-</u>	·2012	2	
								'								

Self-Monitoring Report LLNL Treatment Facility 518-HDTANK (TF518-HDTANK) AREA TF518-PZ

1. Reporting Period: Business Month April Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

March

April

Total monthly time facility operated (hours): 744

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1615	250	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	100	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	350	0.0

5. Discharge Information:

Discharge Location

Receiving

Water Station

Volume

West Perimeter Drainage Channel

TFB-R002

350

6. Comments:

Groundwater extracted from this facility is treated at TFB main, therefore compliance sampling is not required.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 05-21-2012

Self-Monitoring Report LLNL Treatment Facility 518-HDTANK (TF518-HDTANK) AREA TF518-PZ

1. Reporting Period: Business Month May Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 728

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1615	272	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	90	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	362	0.0

5. Discharge Information:

Discharge Location	Water Station	Volume
West Perimeter Drainage Channel	TFB-R002	362

6. Comments:

Air supply to pneumatic pumps turned off 5/22/12 at 15:20 hrs. to allow well levels to recover for groundwater sample collection. Pneumatic pumps were back in service 5/23 at 08:30 hrs. Compliance sampling at this facility is not required, water is transferred to TFB Main for treatment.

7. I certify that the information in this report, to the best of my	knowledge, is true and correct
Operator Signature: Mrs. Human	Date: 06-04-2012

Self-Monitoring Report LLNL Treatment Facility 518-HDTANK (TF518-HDTANK) AREA TF518-PZ

1. Reporting Period: Business Month June Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

June 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 696

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-1615	135	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	48	0.0
SVB-518-201	. 0	0.0
SVB-518-204	0	0.0
Total:	<u>183</u>	0.0

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume
West Perimeter Drainage Channel	TFB-R002	_183

6. Comments:

Compliance sampling at this facility is not required, water is transferred to TFB Main for treatment.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-06-2012

Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 1 (CRD1) AREA TF5475-1

1. Reporting Period: Business Month April Year 2012

2. Dates (in bol	d and	d <u>un</u>	derli	ne)	trea	ted g	roun	d wa	iter v	vas d	isch	arge	d			
March April	31 01 16	02 17		04 19			07 22				11 26			14 29		
Total month	ıly ti	me fa	acilit	у ор	erate	d (h	ours)	: _	<u>0</u>							
3. Monthly Com	plia	nce I	Data:													
Date compli Influent pH: Effluent pH Effluent Ter	:				form	ned (m/d/ː	y): <u>N</u>	iot M	<u>1eas</u>	ured	ļ.				
4. Wellfield Dat	ta:															
Source			thly ime(aneo late(s		ļ.							
W-1302-2	2			0			0.0	0								
Total:				0			0.0	<u>0</u>								
5. Discharge Inf	orma	ation	:						Do	ceivi	na					
Discharge	Loc	ation	1								iig Statio	<u>on</u>	•	<u>Volu</u>	<u>me</u>	
CRD-1	inje	ction	1							V-13	<u>02-1</u>	,			_0	
6. Comments: The treatr once a sol												y wi	ll be	resta	arted	
7. I certify that t	the in		/10							of my	/ knc	wled	ige,	is tru	e and	l correct.
0 . 0 .	15	K 0	W	, 1	10	11	1.1	1	Į.		D		- 00	201/	•	

Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 1 (CRD1) AREA TF5475-1

1. Reporting Pe	riod:	Busi	ness	Moı	nth	<u>M</u>	<u>ay</u>	Year	<u>201</u>	<u>2</u>						
2. Dates (in bo	ld an	d <u>un</u>	derli	<u>ne</u>)	trea	ted g	grour	nd wa	ater v	vas d	isch	arge	d			
May	01 16	02 17			05 20			08 23	09 24	10 25	11 26	12 27	13 28		15 30	31
Total monthly time facility operated (hours):0																
3. Monthly Con	nplia	nce [Data:													
Date compl Influent pH Effluent pH Effluent Te	l: I :			•	form	ned (m/d/	y): <u>N</u>	lot M	<u>1eas</u>	ured					
4. Wellfield Da	ta:															
Source			thly ime(aneo Rate(us gpm)	<u>)</u>							
W-1302-	2			0			0.	0								
Total:				0			<u>0.</u>	0								
5. Discharge In	form	ation	:						Da	: :						
Discharge	e Loc	ation	<u>1</u>		•					ceivi iter S	_	<u>on</u>		Volu	me	
CRD-1	inje	ction	1							V-13	<u>02-1</u>				_0	
6. Comments: The treat once a so												y wi	ll be	resta	ırted	

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Selly D. Kull & Date: 06-13-2012

Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 1 (CRD1) AREA TF5475-1

1. Reporting Period: Business Month <u>June</u> Year <u>2012</u>

2. Dates (in bold a	nd <u>un</u>	derli	<u>ne</u>)	trea	ted g	roun	id wa	iter v	vas d	lisch	arge	d			
June 01		03 18	04 19	05 20	06 21	07 22		09 24	10 25	11 26	12 27	13 28		15	
Total monthly	time fa	acilit	у ор	erate	d (ho	ours)): _	<u>0</u>							
3. Monthly Complia	ance I	Data:													
Date compliand Influent pH: Effluent pH: Effluent Tempo			•	form	ned (1	m/d/	y): <u>N</u>	lot M	<u>feas</u>	ured	!				
4. Wellfield Data:															
Source	Mon Volu	thly ime(g	gal)		stanta		us gpm)	!							
W-1302-2			0			0.0	0								
Total:			0			0.0	0								
5. Discharge Inform	nation	:						Day	:_:						
Discharge Lo	cation	<u>1</u>							ceivi ter S	ng <u>Statio</u>	<u>n</u>	`	Volu	<u>me</u>	
CRD-1 inj	ection	1							<u>V-13</u>	<u>02-1</u>			,	_0	
6. Comments: The treatmen once a solution		•									y wil	ll be	resta	rted	
7. I certify that the	inform	nation	n in t	his r	epor	t, to	the b	est o	of my	kno	wlec	ige, i	is tru	e and correct.	
Operator Signature:	S		4)	KI	4/1		1_		Dat	e: 0 7	7-17-	2012	2	

Self-Monitoring Report LLNL GAC Treatment Unit 09 (GTU09) AREA TF5475-2

1. Reporting Period: Business Month April Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 730

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):

Influent pH:

Effluent pH:

7.0

Effluent Temperature (°C):

19.4

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-1108	214,682	4.9
W-1415	0	0.0
Total:	214,682	4.9

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	<u>Volume</u>
Arroyo Las Positas	TFC-R003	214,682

6. Comments:

Facility was secured at 0800 hours on 4-14-12 to replace carbon canisters and facility was restarted on 4-16-12.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 04-30-2012

Self-Monitoring Report LLNL GAC Treatment Unit 09 (GTU09) AREA TF5475-2

1. Reporting Period: Business Month _	<u>May</u>	Year 2012
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2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 714

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-01-2012</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>19.2</u>

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)	
W-1108 W-1415	175,602 0	5.5 0.0	
Total:	175,602	<u>5.5</u>	

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	_175,602

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-01-2012

Self-Monitoring Report LLNL GAC Treatment Unit 09 (GTU09) AREA TF5475-2

1. Reporting Period: Business Month June Year 2012 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged June <u>01</u> <u>02</u> <u>03</u> <u>04</u> <u>05</u> <u>06</u> <u>07</u> <u>08</u> <u>09</u> <u>10</u> <u>11</u> <u>12</u> <u>13</u> <u>14</u> <u>15</u> <u>16</u> <u>17</u> <u>18</u> <u>19</u> <u>20</u> <u>21</u> <u>22</u> <u>23</u> <u>24</u> <u>25</u> <u>26</u> <u>27</u> <u>28</u> Total monthly time facility operated (hours): 684 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 06-04-2012 Influent pH: Effluent pH: Effluent Temperature (°C): **19.1** 4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm) W-1108 145,695 3.8 W-1415 2,466 1.3 Total: 148,161 <u>5.1</u> 5. Discharge Information: Receiving Discharge Location Water Station **Volume** Arroyo Las Positas **TFC-R003** 148,161 6. Comments: 7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 2 (CRD2) AREA TF5475-3

1. Reporting Period: Business Month April Year 2012

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

March 31

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-1604	0	0.0
W-1605	0	0.0
W-1608	0	0.0
W-1609	0	0.0
Total:	<u></u>	0.0

5. Discharge Information:

Discharge Location	Water Station	Volume
CRD-2 injection	W-1610	0

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 05-09-2012

Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 2 (CRD2) AREA TF5475-3

1. Reporting Period: Business Month May Year 201	112
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2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): $\underline{0}$

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-1604	0	0.0
W-1605	0	0.0
W-1608	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	0.0

5. Discharge Information:

Discharge Location	Water Station Volum		
CRD-2 injection	W-1610	0	

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 06-13-2012

Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 2 (CRD2) AREA TF5475-3

l. Reporting Po	eriod: Business	Month Ju	ne Year 2012
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2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

June 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-1604	0	0.0
W-1605	0	0.0
W-1608	0	0.0
W-1609	0	0.0
Total:	0	0.0

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume
_CRD-2 injection	W-1610	0

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: <u>07-17-2012</u>

Self-Monitoring Report LLNL Vapor Extraction System 08 (VES08) AREA VTF406-HS

- 1. Reporting Period: Business Month April Year 2012
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

3. Wellfield Data:

	Monthly Volume(cu. ft)	Instantaneous Flow Rate(scfm)	P(in. Hg)		Hours of Op.
W-217	647,484	14.7	-2.84	61	733
W-514-2007A	. 0	0.0	0	0	0
W-514-2007B	466,799	10.5	-3.17	61	733
Total:	1,114,283	<u>25.2</u>			

4. Comments:

Facility was discovered shutdown 4/30 due to an unplanned power outage that occured 4/29 at 16:41 hrs. End month volumes for extraction wells were calculated from individual flow measurements, and not derived from facility totalizer values.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature. ______ Date: 05-03-2012

Self-Monitoring Report LLNL Vapor Extraction System 08 (VES08) AREA VTF406-HS

1. Reporting Period: Business Month May Year 2012

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

	Monthly Volume(cu. ft)	Instantaneous Flow Rate(scfm)	P(in. Hg)		Hours of Op.
W-217 W-514-2007A W-514-2007B	688,030 0 510,754	15.4 0.0 10.6	-2.87 0 -3.23	56 0 56	707 0 707
Total:	1,198,784	26.0			

4. Comments:

Facility discovered shutdown 4/30/12 due to failed battery in CPU. Facility was restarted 5/2/12.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report LLNL Vapor Extraction System 08 (VES08) AREA VTF406-HS

1. Reporting Period: Business Month <u>June</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

June <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15</u> <u>16 17 18 19 20 21 22 23 24 25 26 27 28</u>

3. Wellfield Data:

Source	Monthly Volume(cu. ft)	Instantaneous Flow Rate(scfm)	P(in. Hg)		Hours of Op.	
W-217 W-514-2007A W-514-2007B	_	15.5 0.0 10.3	-2.69 0 -3.05	63 0 63	678 0 678	
Total:	1,153,188	25.8				_

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

- 1. Reporting Period: Business Month April Year 2012
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

3. Wellfield Data:

	Monthly	Instantaneous			Hours	
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.	
W-2204	0	0.0	0	0	0	
W-2205	0	0.0	0	0	0	
W-2206	0	0.0	0	0	0	
W-2207A	1,064	0.0	0	0	1	
W-2207B	358,288	7.0	-6	68	719	
W-2208A	1,072	0.0	0	0	1	
W-2208B	228,752	6.4	-5.5	68	719	
Total:	589,176	13.4				

4. Comments:

Facility shutdown 4/3/12 to replace carbon filters. Facility was restarted 4/4/12 @ 14:30 hrs. Vapor samples collected from W-2207A and W-2208A 4/24/12.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

- 1. Reporting Period: Business Month May Year 2012
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 </u>

3. Wellfield Data:

	Monthly Ins	tantaneous			Hours	
Source	Volume(cu. ft) Flo	ow Rate(scfm)	P(in, Hg)	<u>T(°F)</u>	of Op.	
W-2204	0	0.0	0	0	0	
W-2205	0	0.0	0	0	0	
W-2206	0	0.0	0	0	0	
W-2207A	0	0.0	0	0	0	
W-2207B	418,289	9.3	-5.1	68	742	
W-2208A	0	0.0	0	0	0	
W-2208B	289,776	7.1	-4.6	68	742	
Total:	708,065	<u>16.3</u>		•	 -	

4. Comments:

5. I d	ertify	that t	he information	in this	report,	to the	best of	my l	knowledge,	is true ar	nd correct.

- 1. Reporting Period: Business Month <u>June</u> Year <u>2012</u>
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

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3. Wellfield Data:

June

	Monthly Ir	nstantaneous			Hours
Source	Volume(cu. ft) F	low Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	<u>of Op.</u>
W-2204	0	0.0	0	0	0
W-2204 W-2205	Ŏ	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	384,486	9.4	-5	85	677
W-2208A	0	0.0	0	0	0
W-2208B	311,413	7.3	-4.5	85	677
Total:	<u> </u>	167			
i otai:	<u>695,899</u>	<u>16.7</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Dame Momes Date: 07-05-2012

1. Reporting Period: Business Month **April Week: 1** Year **2012**

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

March <u>31</u> April <u>01 02 03 04 05 06</u>

3. Wellfield Data:

Source	Weekly Volume(cu. ft)	Instantaneous Flow Rate(scfm)	P(in. Hg)		Hours of Op.
W-1615	37,185	3.7	-20	40	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	7,035	0.7	-21	40	168
SVB-518-201	. 0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	44,220	4.4			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

1. Reporting Period: Business Month April Week: 2 Year 2012

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

April <u>07 08 09 10 11 12 13</u>

3. Wellfield Data:

Source	Weekly Volume(cu. ft)	Instantaneous Flow Rate(scfm)	P(in. Hg)		Hours of Op.	
W-1615	39,335	3.9	-19.5	44	168	
W-518-1913	0	0.0	0	0	0	
W-518-1914	0	0.0	0	0	0	
W-518-1915	7,060	0.7	-20.8	44	168	
SVB-518-201	0	0.0	0	0	0	
SVB-518-204	0	0.0	0	0	0	
Total:	46,395	4.6	· .		-	

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

1. Reporting Period: Business Month <u>April Week: 3</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

April <u>14 15 16 17 18 19 20</u>

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-1615	38,281	3.8	-19.5	54	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0.	0	0
W-518-1915	7,052	0.7	-21.5	54	168
SVB-518-201	. 0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	45,333	4.5	14		11

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

1. Reporting Period: Business Month April Week: 4 Year 2012

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

April <u>21 22 23 24 25 26 27</u>

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	<u>P(in. Hg)</u>	<u>T(°F)</u>	of Op.
W-1615	39,289	3.9	-19.5	45	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	6,044	0.6	-21.8	48	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	45,333	4.5			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

April <u>28 29 30</u> May <u>01 02 03 04</u>

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft	Flow Rate(scfm)	<u>P(in. Hg)</u>	<u>T(°F)</u>	of Op.
W-1615	38,486	3.8	-19.7	50	169
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	6,077	0.6	-21.7	50	169
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	44,563	4.4			

4. Comments:

5. I certify that the information in this report, to the best of my	knowledge, is true and correct
	_
Operator Signature: 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Date: 06-04-2012
r	Date. Of OTZOIS

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May <u>05 06 07 08 09 10 11</u>

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-1615	37,916	3.8	-19.5	64	166
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	5,987	0.6	-21.8	64	166
SVB-518-201	. 0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	43,903	4.4			

4. Comments:

Transferred 793 gallons of groundwater to TFB Main for treatment.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

1. Reporting Period: Business Month <u>May Week: 3</u> Year <u>2012</u>

2. Dates (in bold and $\underline{underline}$) treatment facility operated

May <u>12 13 14 15 16 17 18</u>

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-1615	38,600	3.8	-19.5	52	169
W-518-1913	0	0.0	0	0	169
W-518-1914	0	0.0	0	0	169
W-518-1915	7,111	0.7	-21.5	52	169
SVB-518-201	0	0.0	0	0	169
SVB-518-204	0	0.0	0	0	169
Total:	45,711	4.5			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

1. Reporting Period: Business Month <u>May Week: 4</u> Year <u>2012</u>

2. Dates (in $\ bold$ and $\ \underline{underline}$) treatment facility operated

May <u>19 20 21 22 23 24 25</u>

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-1615	37,207	3.7	-19.7	49	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	· 0	0
W-518-1915	7,039	0.7	-21.7	49	168
SVB-518-201	. 0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	44,246	4.4			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: ______ Date: 06-04-2012

1. Reporting Period: Business Month <u>June Week: 1</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May <u>26 27 28 29 30 31</u> June <u>01</u>

3. Wellfield Data:

Source	Weekly Volume(cu. ft)	Instantaneous Flow Rate(scfm)	P(in. Hg)		Hours of Op.
W-1615	36,612	3.6	-19.8	80	170
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	7,119	0.7	-21.5	80	170
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	43,731	4.3			7

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

1. Reporting Period: Business Month <u>June Week: 2</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

June <u>02 03 04 05 06 07 08</u>

3. Wellfield Data:

Source	Weekly	Instantaneous	D(in IIn)		Hours
Source	volume(cu. It)	Flow Rate(scfm)	<u>P(in. Hg)</u>	<u>I('F)</u>	<u>or Op.</u>
W-1615	36,007	3.6	-19.8	61	167
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	7,001	0.7	-21.5	61	167
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	43,008	4.3			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

1. Reporting Period: Business Month <u>June Week: 3</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

June

<u>09 10 11 12 13 14 15</u>

3. Wellfield Data:

	Weekly	Instantaneous			Hours
<u>Source</u>	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	T(°F)	of Op.
W-1615	36,526	3.6	-19.5	68	169
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	7,102	0.7	-21.5	68	169
SVB-518-201	. 0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	43,628	4.3			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

1. Reporting Period: Business Month <u>June Week: 4</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

June

<u>16</u> <u>17</u> <u>18</u> <u>19</u> <u>20</u> <u>21</u> <u>22</u>

3. Wellfield Data:

	Weekly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-1615	37,052	3.7	-19.5	52	167
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	8,011	0.8	-21.5	52	167
SVB-518-201	. 0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	45,063	4.5	 -		

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

1. Reporting Period: Business Month <u>June Week: 5</u> Year <u>2012</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

June <u>23 24 25 26 27 28 29</u>

3. Wellfield Data:

	Weekly	Instantaneous			Hours
<u>Source</u>	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u>	of Op.
W-1615	37,496	3.7	-19.5	58	169
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	9,121	0.9	-21.5	58	169
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	46,617	4.6	· .		

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

1. Reporting Period: Business Month April Year 2012

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

March 31

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

	Monthly	Instantaneous		I	Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>r(°F)</u> (of Op.
W-ETS-507	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
W-2303	. 0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
Total:	0	0.0			

4. Discharge Information:

<u>Discharge Location</u>

<u>Nater Station</u>

<u></u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

1. Reporting Period: Business Month May Year 2012

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

	Monthly	Instantaneous		F	lours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>Γ(°F)</u> ο	f Op.
W-ETS-507	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
Total:	0	0.0			

4. Discharge Information:

Discharge Location	Receiving <u>Water Station</u>	Volume
VTF5475 Vapor Injection Well	SVI-ETS-505	0

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

- 1. Reporting Period: Business Month <u>June</u> Year <u>2012</u>
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

June 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

	Monthly	Instantaneous		ŀ	lours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>Γ(°F)</u> ο	f Op.
W-ETS-507	0	0.0	0	0	0
W-1605	0	0.0	0	Õ	Ö
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
W-2303	0	0.0	_ 0	0	0
Total:	0	0.0			

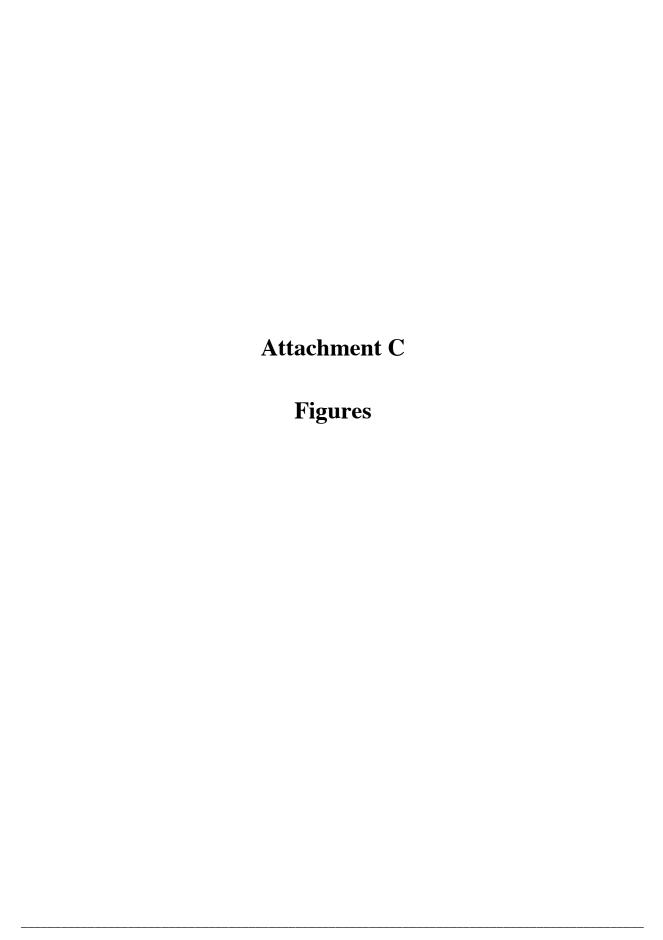
4. Discharge Information:

Discharge Location	Water Station	Volume
VTF5475 Vapor Injection Well	SVI-ETS-505	0

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.



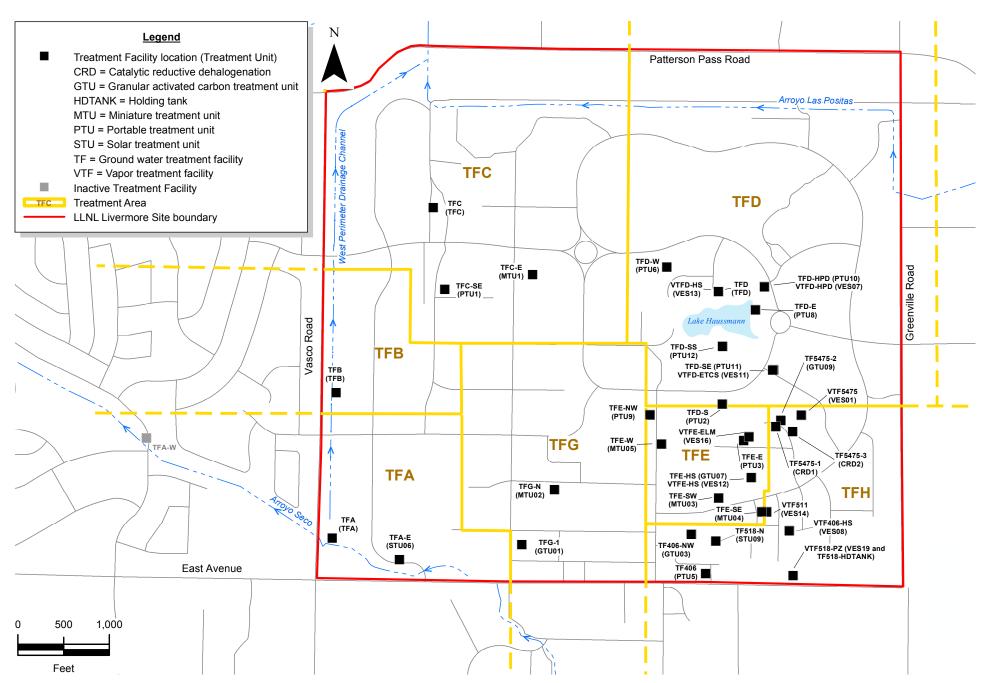


Figure 1. Livermore Site treatment areas and treatment facility locations.

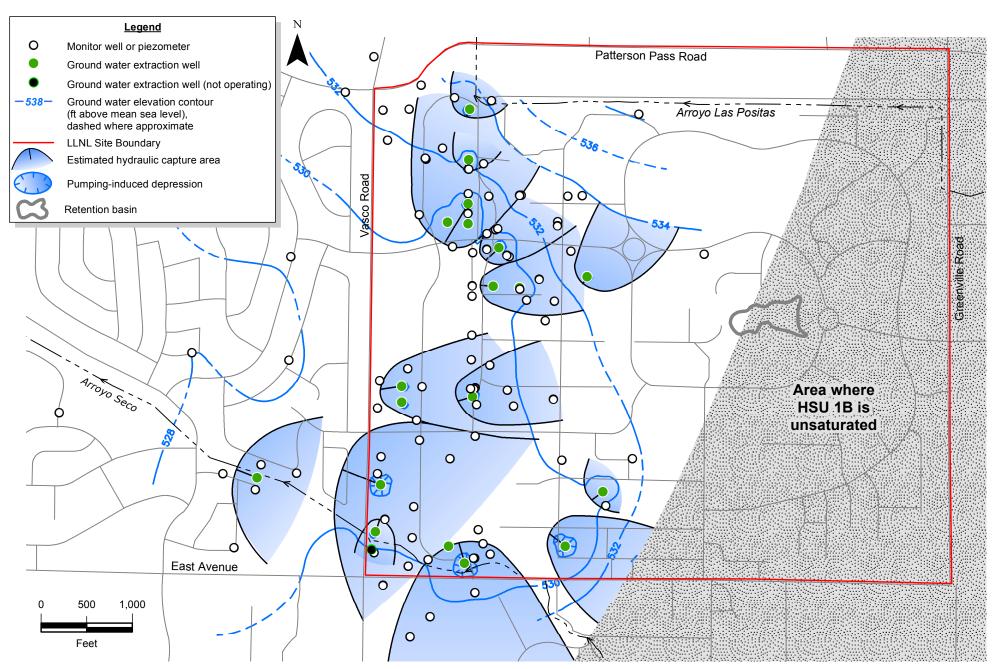


Figure 2. Ground water elevation contour map based on 110 wells completed within HSU-1B showing estimated hydraulic capture areas, LLNL and vicinity, second quarter 2012.

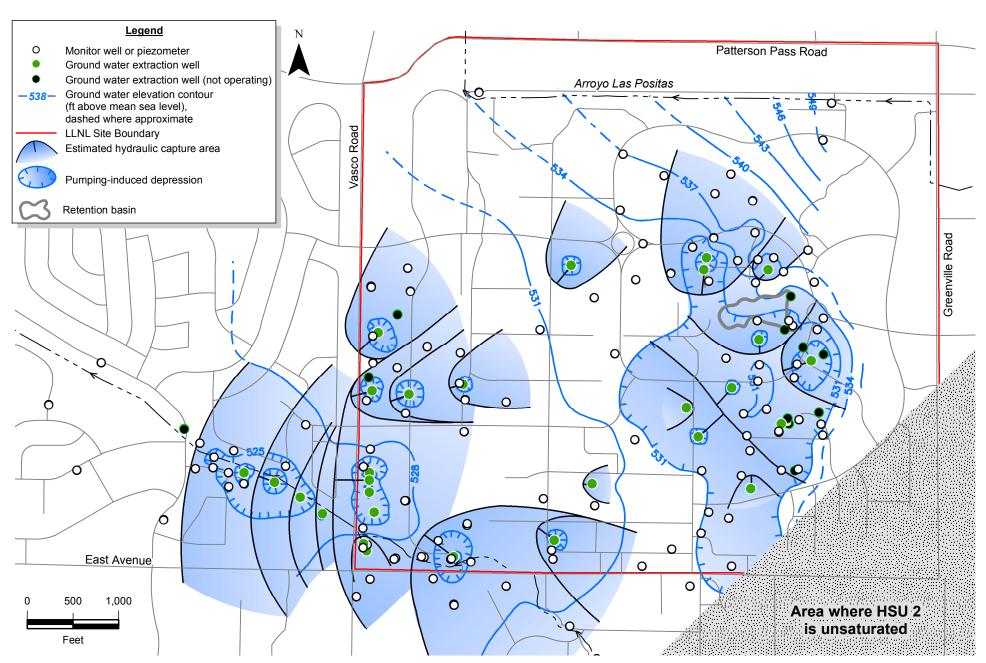


Figure 3. Ground water elevation contour map based on 161 wells completed within HSU-2 showing estimated hydraulic capture areas, LLNL and vicinity, second quarter 2012.

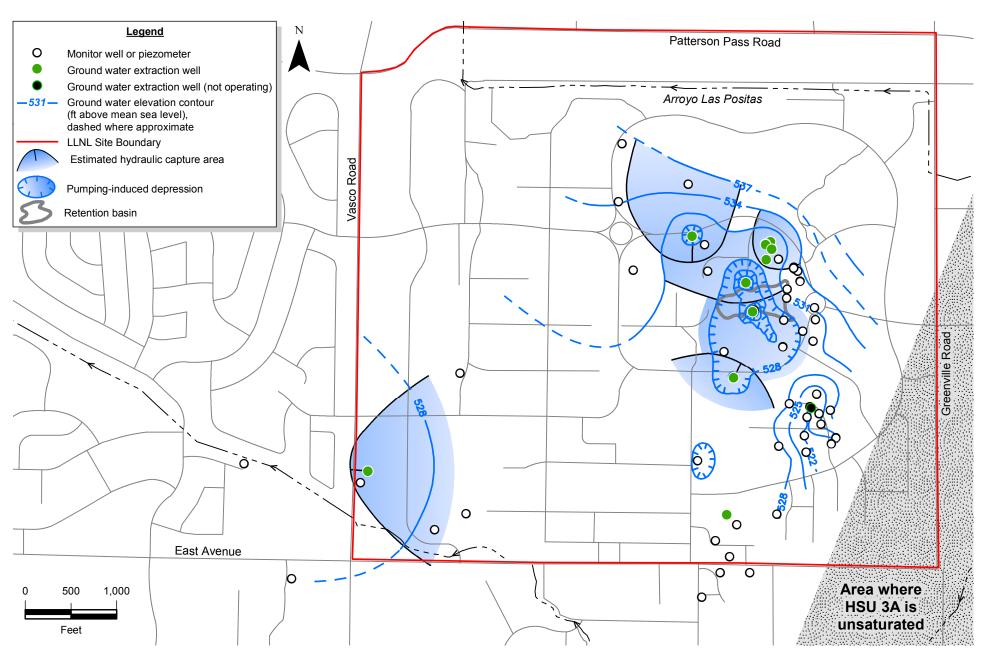


Figure 4. Ground water elevation contour map based on 56 wells completed within HSU-3A showing estimated hydraulic capture areas, LLNL and vicinity, second quarter 2012.

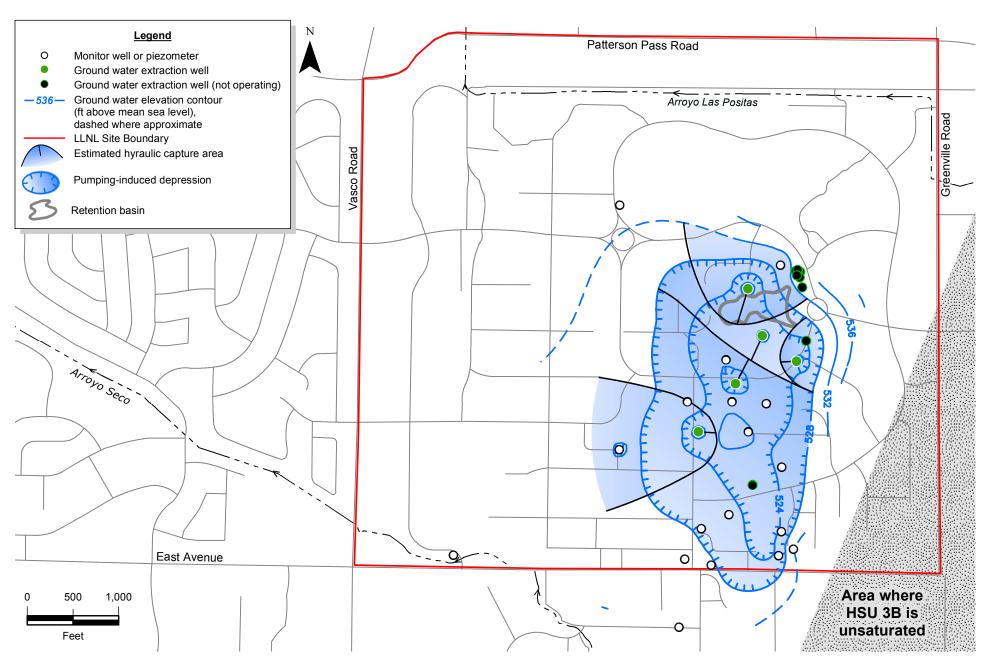


Figure 5. Ground water elevation contour map based on 33 wells completed within HSU-3B showing estimated hydraulic capture areas, LLNL and vicinity, second quarter 2012.

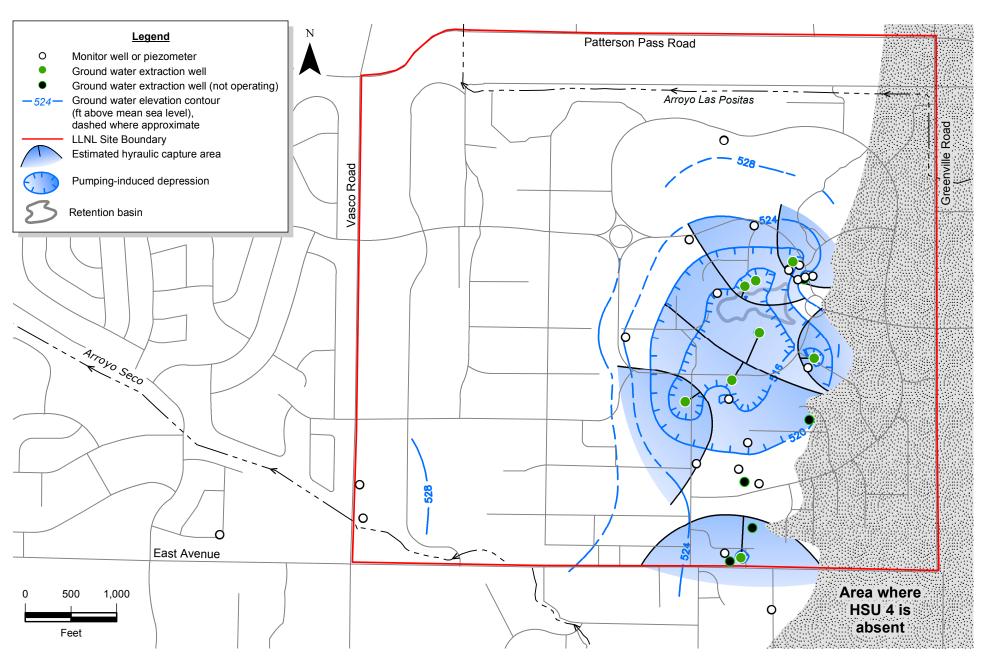


Figure 6. Ground water elevation contour map based on 35 wells completed within HSU-4 showing estimated hydraulic capture areas, LLNL and vicinity, second quarter 2012.

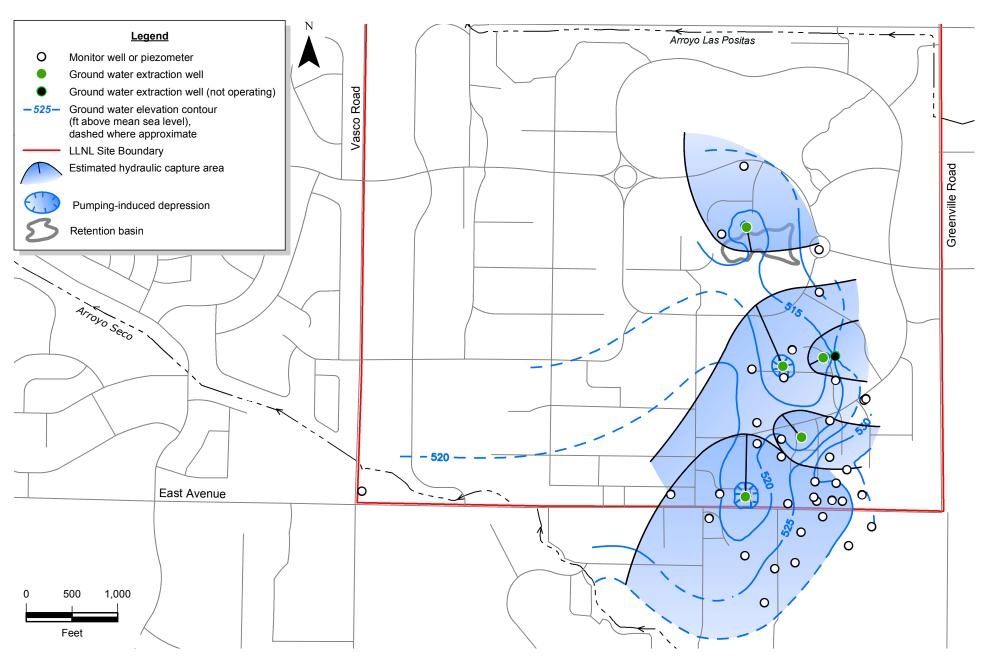


Figure 7. Ground water elevation contour map based on 43 wells completed within HSU-5 showing estimated hydraulic capture areas, LLNL and vicinity, second quarter 2012.